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Who, some years since, did the largest mail order business in the specimen and supply line in the World, is now devoting his entire time and energy to his Profession—but he still has thousands of dollars locked up in his old business and is closing out specimens, collections, etc., at "unheard of prices." New lists have just been issued on "Books for the Ornithologist," "Scientific Shells," "Selected Corals, Shells, Minerals, Curios, Relics, etc." "Barrel of Shells," "Nature Study Collection" also a selected list of "specimens, curios and publications" which are being closed out at one-fourth rates. Other lists are to follow as time will permit. All are free upon request Write today



Vol. II.

January, 1902.

No. 1



These young Red-shouldered Hawks extend, for us, a New Year's Greeting to you all.

Their appealing attitudes, and especially their lusty voices, suggest the thought that they are calling for more subscribers to AMERICAN ORNITHOLOGY. Would it not be well for all, not now enrolled, to begin the new year aright and accept the invitation at once.

BALD EAGLE.

A. O. U. No. 352.

(Haliaeetus leucocephalus.)

RANGE.

Distributed rather locally throughout the whole of North America.

It breeds throughout its range, and in the winter migrates southwards, especially from the northern portions of its range.

DESCRIPTION.

Length, about 3 feet; extent, from 6 to 8 feet; tail, about 1 foot. Adults:—The female is generally larger than the male. Eye, bill and feet, yellow. Head and tail, white. The remainder of the upper and under parts, together with the wings, are dark brown. This plumage is acquired during their third year. Young (1st year):—Eye and bill, brown. Feet, Yellow. Color, a uniform dark brown all over. (2nd year):—Uniform brown, with the feathers edged with lighter and feathers about the rump and base of neck light in places.

NEST AND EGGS.

The Bald Eagle nest in the tops of the tallest trees. The nest is naturally a very large structure composed of large sticks and lined with roots. As the birds use the same nest year after year, and repair it each time, it becomes an enormous structure, often six or seven feet across.



EGG OF BALD EAGLE.

On rocky coasts where suitable trees are scarce, they will build their nests upon the high cliffs. In Florida they commence nesting early in January, and the period varies from that time until the latter part of April in the northern parts of its range. The eggs are commonly two in number, sometimes three. They have a granulated surface and are white in color, although nearly always they are somewhat nest stained.



BALD EAGLE.

Photograph by E. W. Campbell.

HABITS.

What pulse does not beat more rapidly at the sight of an Eagle, as in his majestic flight, he executes circle after circle and finally vanishes from view without an apparent beat of his immense wings. From childhood, we have had related to us, stories of the strength and daring of these grand birds, and although some of them are probably rudely shattered, still we always retain a wholesome respect for the bird that has gained so great renown.

The variety best known to the American people, especially those near the coast, is the Bald Eagle. It must not be supposed that this magnificent bird of prey is in reality bald. This name was given him as, at a distance, it appears as if he might be in that unfortunate predicament. In reality his head is covered with snow white feathers, and "White-headed Eagle," a name that is often given to him, is much more appropriate. The young birds of this species are of a uniform dark brown color, but after the third year of their existence, their head and tail become pure white, a change that comes remarkably early considering that their natural life is nearly a hundred years. It seems strange at first thought that the young birds should be larger than the old ones, but such is the case. As they grow older, the muscles become hardened by usage and gradually contract so that the adult bird will measure several inches less in extent than he did in his youth. This fact, together with the great change in coloration, gave rise to the former impression that the old and young were two distinct species.

This proud monarch of the air is also our national bird and his portrait adorns several of our coins. He was selected because of his imposing aspect, size, strength and daring. Some have accused him of cowardice, because often crows or smaller birds will apparently drive him away, but it is a mistake on their part. In all probability, he acts on the same principle as the man who is hectored by small boys. Until they become too impudent, he disdains to notice them.

Many a neighborhood boasts of its pair of Eagles, and so attached to them do the country folks become, that they would as soon think of making war upon each other as to harm them. It is well that popular sentiment protects them thus or they would soon all be destroyed.

In their home life, Eagles are much devoted to each other and remain mated for life, using the same nest year after year, unless robbed. Their food consists of flesh, either fresh or decomposed. They are found much more commonly near the sea coast than in the interior, and they have the requisite speed and strength to capture many species of ducks and water birds. Their chief food, however, is fish. This they get in several ways. They sometimes dive for them in the manner of the Osprey,

catching them in their talons; again they will stand in shallow water and strike at them with their bills, heron fashion; often they will rob the Fish Hawk of his skillfully gotten prey. The pursuit of an Osprey has been told, times innumerable. Suffice it is to say that the Eagle from his outlook watches the Osprey catch his fish, then pursues him; by superior speed and strength, he at length overtakes his victim, and the latter to save himself, drops the fish which is caught in mid air by the Eagle.

Because of being shot at so persistently, they are very wary, and will not, knowingly, allow any one to approach near. They are very courageous and if wounded will put up a plucky fight for their life. They have been known to attack human beings without provocation, but such instances are very rare, and must be occasioned by extreme hunger.

These birds are frequently seen in captivity, and are often kept for years. It must be hard though for a bird of their wild disposition, used to soaring through unlimited space, to be chained down or confined to the narrow boundaries of a cage. I hope soon to see them protected by law, in addition to sentiment, in all states. While the real good they do is limited to what carrion they destroy, the harm they do is limited also, and I think that we all will forgive the "emblem of our republic" if occasionally he makes a meal on some of the other birds, especially as the ones chosen by him have really no value to the community greater than that possessed by the Eagle.

LONG-BILLED CURLEW.

A. O. U. No. 264.

(*Numenius longirostris*.)

RANGE.

With the exception of the extreme northern part, this Curlew is found over the whole of North America. It is very irregularly distributed, and breeds along the South Atlantic coast and in the interior of its range.

DESCRIPTION.

Length, about 25 in.; extent, 39 in.; tail, 4 in.; bill, from 6 to 8 in., and greatly curved. Eye, bill and feet, brown. General color above and below, dull yellowish red, lightest on the throat. The top of head, neck, breast and back are streaked and the wings and tail barred with dark brown.

NEST AND EGGS.

The nest of this bird is simply a hollow in the ground. They line it sparingly with a few grasses and during May and June lay three or four eggs. These are of a greenish yellow color, and heavily blotched with brown.

HABITS.

This is the largest of the American Curlews, and also of that class designated as wading birds. He has no disagreeable traits whatever, still he is very unfortunate in several particulars. He has the misfortune to be classed by the sporting fraternity as a game bird, a misfortune that costs all birds, of whatever species, dearly, and that hits this bird rather more severely than some others. Another characteristic that often proves disastrous to the safety of the bird is its sympathetic nature. A sportsman, who enjoys his annual vacation, shooting shore birds on the South Atlantic coast has given a few notes on these birds from his point of view.

These long-billed waders feed principally upon worms and small shell fish. These latter they obtain at low water on the mud flats that are laid bare at this time. When the returning waters cover these feeding grounds they retire to the meadows further inland and search for worms. Just above high water mark on one of these flats, the sportsmen had constructed a blind of driftwood and seaweed. For several days these men could be found in close proximity to this refuge. One morning as they were waiting for the flight of birds to commence, they saw coming a flock of about twenty large birds of the Plover family. They were flying in the form of a letter V, with the point forwards, and as they passed by just out of gun shot, they were able to identify them, by means of their extremely long curved bills, as the Long-billed or as the sportsmen know them, "Sickle-billed" or "Spanish" Curlews.

As they passed they were uttering a whistle, something like "ker-lee"; an imitation of this call, caused the entire flock to wheel about and circle over the blind, and several fell as the four shots, fired by the two men, rang out. Instead of being frightened away, as most birds would have been, the remainder of the flock circled back time after time as though to encourage the wounded birds that lay, calling, on the beach, to rise and follow them. Of course each time as they went within gunshot of the blind, several shots would be fired, and the result was that the men came home well satisfied with their score, and without giving a thought as to how long any of the birds would be left under this wholesale destruction. They got fourteen out of the twenty.

In considering this matter strictly in accordance with the law, this wholesale slaughter is justifiable, but as a lover of birds said to me only the other day, in speaking of the scarcity of game birds: "Well, if the birds had the power to talk, they would put up quite an argument as to why they should be allowed to live."



LONG-BILLED CURLEW.





It hangs in the branch of a pear tree,
Lonely and tenantless now,
'Mid Winter winds whistling and wailing
It clings to the leafless bough.

It hangs with its hay scented grasses
Tattered and torn by the rain,
A bit of sweet Nature's old story
Left now at the Summer's wane.

The Chickadees hop in the branches,
Nuthatches pound on the tree,
Where once in the sunshine of Summer
The Vireo sang to me.

He preaches a sermon of friendship,
Over and over again,
And tells in his own winning language,
Of love and goodwill to all men.

I wait till the Summer returning
Laden with sunshine and rest,
Shall bring back my Vireo preacher
To build near the empty nest.



Fig. 1.

Photo from life by Dr. R. W. Shufeldt.

TEXAS BOB-WHITE.



In the course of my experiences in the photography of birds, the American partridges have always been favorites of mine. A year or so ago the opportunity was offered me to experiment in this way with a number of our western species and subspecies of the *Perdicinae*, notably the Texan Bob-White (*Colinus v. texanus*) Figure 1, ♂, the Plumed partridge (*Oreortyx p. plumiferus*,) the Chestnut-bellied Scaled Partridge (*Callipepla s. castanogastris*) Figure 3, ♂, and the California Partridge (*Callipepla californica*) Fig. 2, ♂. I have also successfully photographed in life the common quail of Europe, both the male and the female birds,—adult specimens.

All of the live American partridges I photographed were kindly loaned me by Mr. Edward S. Schmid, who keeps an Animal Emporium at No. 712 12th street, N. W., Washington, D. C., he having received them from his collectors in the west.

At that time I was living in Washington, and Mr. Schmid permitted me to take his birds to my home, and keep them in large cages until such times as I had been successful in securing negatives of them. As a rule I selected only the best plumaged and the strongest male birds, though in the case of the little common quail of Europe, I obtained fine results, both of the male as well as the female.

These last named have been published in a number of places, but being birds of another country they are not suitable subjects to reproduce here, that is, in a journal so strictly devoted to the ornithology of the United States.

In the case of the Texan Bob-white, I secured my specimen in one instance almost life-size when standing; I also obtained it when perched up in the limbs of a tree. It was a fine male individual and after he had been in my possession about a week, he became very docile, and gave me but little trouble in securing his photograph.



FIG. 2.

CALIFORNIA PARTRIDGE.

Photo from life by Dr. R. W. Shufeldt.

To get him on the ground, I simply had a big piece of an old rough log put up in a favorable light in my studio. Then selecting a suitable part of this, I focussed upon it as sharp as possible with an open lens. My Partridge was then induced to walk up and down upon this log until he became thoroughly accustomed to the novelty of the procedure. Finally, in the course of these short promenades, he happened to stop on the very spot on the old log, where I had focussed. In the meantime, however, I had inserted a very small "stop" and a very quick plate, and the light being exceptionally good, I risked what practically almost amounted to an instantaneous exposure. As a result of this operation, I secured a beautiful negative, and some day later on I hope to be able to publish a reproduction of it in the *AMERICAN ORNITHOLOGY*.

The second time I attempted this Texan Bob-white was on the same day and in the same place. Removing the log, I replaced it with the small limb of a tree, and by a little gentle persuasion, I was not long in inducing this very amiable Partridge to walk up along it. I had focused on a point where the branches forked, and as he reached there he took a notion to squat down. He appeared so charming in this attitude and the high light rendered him and his deep tinted plumage so handsome that I could not resist the temptation, so by a gradual, though, rapid pressure of the pneumatic bulb, I fortunately made a fine result, and a reproduction of this is here shown in figure 1, of the present paper.

I found Bob-whites far easier to photograph than any of the western Partridges, except, perhaps, the Chestnut-bellied Scaled Partridge, a form I was particularly successful with, both on the ground as well as on the limbs of trees.

In figure 3, for example, we have this bird absolutely as he appears in nature. Under the proper course of training he had become very gentle indeed, and would walk up and down my extended arm without any apparent fear or concern whatever. He was extremely alert, however, and the very slightest sound attracted his attention, and in expressing his state of incessant awareness he would keep raising and lowering his very pretty crest, and in the same gradual manner that some of the larger butterflies open and close their wings. At last, however, when I felt pretty sure that his ruffled spirits were down to their normal ebb, I allowed him to walk off of my arm and hand or to the limb of an oak, which I had prepared for him in the same manner as I had previously arranged the limb of a tree for my Texan Bob-white. It was not long before I had made three or four successful exposures on him in this situation, and one of the best of these is here reproduced in figure 3.



Fig. 3.

Photo from life by Dr. R. W. Shufeldt.
CHESTNUT-BELLIED SCALED PARTRIDGE.

He had turned about and faced the camera, which was not over a yard removed from him. Next, with great deliberation, he squatted down upon the limb. I then came over well to his left side, and he slowly turned his head to regard me and my movements. Waiting quietly a moment, I then attracted his attention with an almost inaudible squeaking note, made with my teeth and lips. This caused him to raise his crest to the full height, and this was exactly what I desired. By cautiously varying the note, I powerfully held his attention, and induced him to keep his crest up for at least two seconds. During this very valuable and important interval, I made the exposure, the plate being a very sensitive one, and 5 x 8 in the matter of size. In a few moments in the dark-room, I soon appreciated the fact that I had been successful in photographically bagging as handsome a specimen of this interesting little Partridge as ever was seen.

On the same day, and by similar methods, I obtained several fine negatives of the California Partridge, both perched up on limbs as well as in other attitudes. One of these was nearly life size, and this one is reproduced here in figure 2, and it gives a very excellent representation of this bird as he appears perched up on the limb of a low shrub, at a foot or so above the ground.

Photographs from negatives of this bird have been published by me before, both in this country and in Europe, and up to the present time, always as a specimen of Gambel's Partridge. I am now convinced that the bird is a California Partridge (*Callipepla californica*), and that I have never made a photograph of Gambels. Mr. C. A. Reed, the editor of the present journal, brought me about to this opinion and my thanks are due to him for his having kindly loaned me skins of the two different species for comparison. Primarily I was deceived in the premises by Mr. Schmid having told me that the birds were captured in Texas, and an authority on game birds, who saw this lot alive, remarked off-hand that they were Gambel's Partridges, and the mistake, inadvertently having started in this manner, is here, now corrected for the first time.

The reproductions of the figures in the present article are from platinum prints and therefore are not quite as strong or as sharp as had they been made from an albumen paper. Still they possess a softness and a charm that the plate made from the latter paper seems to be unable to render.

In making pictures of this class one can only succeed with them by employing, in the case of his material and apparatus, the best of everything to be had in the market. The purest chemicals, the finest and quickest plates, not less in size than a 5 x 8, the most expensive len-

ses, and, finally, good taste and judgment, and a constant exercise of all the wits and patience one has at command are all required. It is only by such means and procedures that the naturalist photographer can ever hope for even partial success and mediocre achievement in this truly interesting field.

SWAMP SPARROW.

A. O. U. No. 584.

(*Melospiza georgiana*.)

RANGE.

Eastern North America from the Atlantic to the Plains and from southern Canada and New Foundland to the Gulf States, the latter locality being its winter quarters. Breeds from the Northern United States northwards.

DESCRIPTION.

Length, 5.75 in.; tail, 2.25 in. Bill, feet and eye, brown. Adult in spring:—Forehead, black. Top of head, chestnut, edged with blackish. Back, dull yellowish, broadly streaked with black. Primaries and tail, reddish brown. Line over the eye and band extending across the breast and to the back of the neck, gray. Sides of the head and flanks, yellowish brown. In the fall the chestnut on the head is nearly obscured by black streaks; this is also the case with the young birds.

NEST AND EGGS.

The Swamp Sparrow constructs its nest on the ground, in low swampy localities. It is generally concealed in some thicket by overhanging clumps of grass. The eggs are three or four in number, pale blue, and quite heavily blotched with various shades of brown. They breed in the northern parts of the United States and in southern Canada about the latter part of May.

HABITS.

All day long, and growing in intensity as dusk approaches, comes from the bog, the shrill calls of numerous young frogs, interspersed now and then with the deep bass voice of some of their elders; here the turtle basks in the sunshine on some half sunken log, and the muskrat leaves a widening trail of ripples as he wends his way up the stream; numerous unstable clumps of grass dot the edges of the creek, and beneath the arch of overhanging alders is a tangled mass of weeds and blackberry vines.



SWAMP SPARROW.

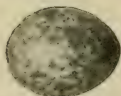




Photo by C. H. Morrell.

NEST OF SWAMP SPARROW.

Amid surroundings such as these, you will find the Swamp Sparrows. These dark colored, handsome members of the Finch family are much more intimately acquainted with neighbors such as these, than with mankind, for whom they have a wholesome fear and respect.

Although there might be a large number of them in some low thicket, unless you were purposely looking for them, in all probability you would pass by without being aware of their presence. Happy and active, when no one is around, the instant an enemy appears, all song ceases and with the exception of a few warning chirps, all are silent until you have passed.

I have cautiously approached a flock, early in the morning when they are singing at their best, and seated myself in their very midst. Every once in a while, above the rustling of the leaves, caused by them in their search for food, I could hear a beautiful little song consisting of several trills given in a low sweet tone so as to appear to be at quite a distance from me. Another song frequently heard was a very rapidly repeated chirp, forming nearly a continuous note and not unlike that of the Chipping Sparrow. I had been there but a few minutes before one of them hopped to a twig within arm's reach from me. He had no idea there was anybody near and looked at me for an instant as if he could hardly believe his eyes, then with one loud, deep chirp, dropped out of sight. At once all the birds about me, who had been quite noisy, became silent. Evidently my discoverer told them all what was the

matter, for one after another flew to a location from which they could see me. It is quite difficult to make them take wing, as they are very agile and will dodge in and out among the clumps of grass and escape observation., and when they do fly, it is only for a few feet. I have repeatedly seen them do apparently impossible feats of walking upon the water. They would run rapidly across the creek, taking advantage of every floating twig or leaf, without allowing their unsecure footing the necessary time to sink beneath their weight.

A WOODLAND SONGSTER.

In nearly all New England woodlands, particularly those slightly inclined to be marshy, the Veery will be found. He is frequently classed as the sweetest American songster, but although it is very pleasing to the ear to hear his clear, tremulous, whistling solo, early in the morning and towards dusk, I hardly think that he has earned this high distinction. I had the fortune to observe the home life of a pair of them this past summer. The illustrations with this article, I prize more highly than any others that I have secured, because of difficulties and other incidents connected with their taking. That I only secured two good photographs of the bird in as many weeks, does not signify that that this is all the plates that I exposed. On the contrary, at least a dozen were transformed into worthless pieces of glass, some from faults of my own and others from unavoidable circumstances. Before discovering the nest shown here, I had attempted to photograph two others, but could not as the patience of the birds exceeded my own, and neither of them would return while I was near.

As I was walking through a certain small marshy bit of woods, I was startled by the flushing of a bird at my feet. Her alarm note as she disappeared through the underbrush announced that it was a Wilson's Thrush or Veery. Glancing downwards, from whence she had started, my eyes at once rested on four bright blue eggs snugly nestled in a handsome cradle of grapevine. It hardly seems possible after finding the nest of this bird that one can go by and not notice such a conspicuous object; yet I have spent more than an hour looking for one, and been unable to find it, although I was certain that it was but a few feet away. These birds almost always nest in places which are well covered with brush or weeds, and a single fern or leaf over the nest conceals it effectively.

The day following my discovery, I returned to see what success I might have with this nest. I first watched and saw that the bird always entered the nest from the rear, and then I placed the camera in



Photo from life by C. A. Reed.

INSPECTING HER TREASURES.

front of the nest and with the lens about two feet from it. The whole outfit was then covered with a green cloth and plentifully sprinkled with leaves and branches, so as to attract as little attention as possible, although probably the bird thought that it was very conspicuous. I have often wondered that they dared to return to their nest when any such contrivance was placed before it. They prove that they have a large amount of courage and I doubt, were we placed in the same position, if we would ever return to our homes. After having affairs arranged to my satisfaction, I retired as far as the tubing would allow and, concealing myself as best I could, waited.

The trees about me were very tall and the sun came through the dense foliage in only one large patch, from an opening nearly over the nest and a little to the southward, thus allowing the sun to shine directly on the nest from about nine o'clock in the morning until two. After waiting about an hour without seeing a sign of either of the birds, I began to fear that unless they returned very soon the eggs would be baked by the extreme heat of the sun, so I arranged a blackberry branch, that had previously shaded the nest, so that with a thread I could very gradually draw it to one side when the birds returned, and allow it to furnish shelter to the eggs, when they were absent. Both birds would come at times, and after much calling to each other, depart although frequently during these intermittent visits, my hand would grasp the bulb more firmly, in anticipation of seeing one of them hop to the nest. During their periods of absence, the silence was oppressive, the only notes heard being an occasional lisp from the Redstart, who had a nest in a tree a short distance away, a sharp chirp from the little Chestnut-sided Warbler, whose nest was in the blackberry vines within plain view from where I sat, and the buzzing of numerous mosquitos. And by the way, if these last mentioned had confined their attentions to merely buzzing, their presence would have been more welcome but as it was I can testify that, although they may not equal the famous Jersey mosquitos in size, their bites were of good quality.

Just twice during the three days that I was present, while the nest contained eggs, did the owner visit the nest, that is to actually stand upon the edge. On the first negative that I exposed I was unable to find a trace of the bird, but on the next was the one shown here. The day after obtaining this picture, I found that the nest contained young, and the parents were much more anxious than formerly. Not wishing to expose the young to the sun even for a short space of time, I did not attempt to photograph the birds again until the little ones were a week old and commencing to look like feathered birds instead of the naked, helpless mites that they first were.



Photo from life by C. A. Reed

ALWAYS HUNGRY.

From this time forth the parents remained in the vicinity of the nest when I was about. Several incidents occurred to relieve the monotony of waiting, although probably the birds would have returned to the nest sooner if the interruptions had been omitted. I had just settled down to business, and the Thrush was showing signs of returning for her portrait, when a fusilade of shots came from the edge of the wood. Soon a twenty-five year old boy appeared, armed with a small repeating rifle. He passed by, about twenty yards from me, and showed his sporting proclivities by firing at everything animate that appeared, and, when he could see no living thing to try his skill upon, he would fire at the surrounding trees, just for excitement. I kept close watch of him to see that he did not notice the camera, for he certainly would have tried to hit it, although his enthusiasm far exceeded his skill, for he missed everything that he fired at while he was within my view.

After the temporary excitement had subsided, the mother bird, with her beak filled with grubs, began her maneuvers about the nest. After inspecting the camera closely, from several points of view, she descended to the ground and walked completely around the nest several times, each circuit bringing her nearer to the goal, and raising my hopes of obtaining her photograph. Each time when she came to the small tube which connected the camera shutter with my place of concealment, she would stop and look it over carefully, then cautiously step over and inspect it from the other side, before continuing her tramp. Finally she hopped on the edge of the nest to deliver her load to the expectant young, and my longed for chance had come.

We went through this same operation several times during the next few days, but with the exception of the one shown here the results were a failure from my point of view. This photograph shows but three birds whereas there were four. One of them did not see the parent bird returning and the others in their eagerness to be fed, walked all over him.

On one other occasion, after the shooting episode, my solicitude in regard to the safety of the camera was aroused. This little piece of woods was used as shelter from the heat by a number of cows. On one of the days when I was present, one of them noticed the camera, and having an inquisitive disposition, she proceeded to investigate. Although there were leaves of the same kind on every hand, she persisted in eating those on the branch that shielded the camera, and seemed to take it unkindly when I was forced to drive her away.

And now we come to the closing chapter of my observations, and a sad one it is. On nearly every day that I was in the woods, I either saw or heard two dogs prowling through the underbrush. One of these

was a light colored hound, and he was the author of the following deed. I was not more than forty feet from the Veery's nest, and was trying to photograph the Chestnut-side, which has been mentioned before. The gray hound was beating about the bush, throughout the woods and occasionally I would catch sight of him as he stopped and sniffed the air. Soon he uttered a short joyful bark, and then all was still once more. Evidently he left the woods at once, for I soon heard him bay-ing farther off. I understood the meaning of his bark, when I left the woods about ten minutes later. When I passed the Thrush's nest it was upside down and every little one had disappeared. Why the old birds had created no noticable disturbance, I cannot say, but before me was the evidence firmly fastening the guilt upon the dog. The parent birds must have left the locality at once, for they were neither seen nor heard there again. Let this be a warning to those who own a dog of any variety. Do not allow him to roam the woods alone, under the impression that he is only following the scent of some squirrel or rabbit.

CHESTER A. REED.

THE OVEN BIRD.

A. O. U. No. 674.

(*Seiurus aurocapillus*.)

RANGE.

Eastern North America generally, from the gulf to the arctic regions, apparently common and breeding everywhere throughout its range, wintering sparingly along the gulf coast, but mostly in the sub-tropical regions beyond.

DESCRIPTION.

Length, 6 to 6.5 inches; extent, 9.5 in.; tail, 2.5 in. Eye, brown. General color above, brownish or yellowish olive, with an ochreous yellow crown margined with black. The under parts and a line over the eye, white. The breast is streaked with arrow shaped spots of black, thus resembling very especially the thrushes in color, in which group, it was formally classed merely from analogy, but it is now regarded as a sort of a wagtail Warbler.

NEST AND EGGS.

The nest, which is on the ground in the woods, is a very marked structure, generally substantial and roofed over, with an entrance on the side. This bears such a striking resemblance in miniature to the old fashioned out-door oven, that the builder has been quite generally, in fact almost universally christened, the "Oven Bird." The nest is mainly built of leaves compounded with dried grasses, shreds of bark,



OVEN BIRD.

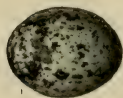




Photo by C. H. Morrell.

NEST OF OVEN BIRD.

fine twigs and often ornamented with mosses and skeleton leaves. Often it is a thing of beauty. I have found it, however, quite scantily built almost wholly of pine needles, when located in a pine forest. The eggs are four or five in number, unusually rounded, and are white as porcelain, finely spotted and specked with red, brown and lilac, the marks being mostly around the larger end in the form of a wreath. In a neatly built nest finely lined with skeleton leaves and horse hair, they are truly objects for admiration, and always seem to say to the beholder, "Hands off."

HABITS.

One of the most constant and noticeable habits of this bird is its keeping so persistently to the ground. Here it walks about, keeping time and balance with a motion of the head, in the most dainty dove-like manner.

It is pre-eminently a walking bird. Here, too, like the strictly ground Warblers, it must find its food. Never describing curves in the manner of the Flycatchers, nor flitting among the branches, like the *Dendroica*, (or *Silviadae* formerly), it scratches among the leaves after the manner of a Chewink. Here its sharp chipping alarm note is often heard, especially in the breeding season, which is generally late in May or early in June. Nothing is more characteristic, of our beautiful forests than its unique chant, "Ke-chee, ke-chee, ke-chee, ke-chee, ke-cheer ———." Often beginning so softly that you might imagine the bird

some distance away, but increasing in force noticeably to the end, perhaps becoming almost shrill and disclosing the ventriloquist near by on a lower limb, head up, motionless at first but finally shaking himself from head to tail in emphatic utterances of his last syllables. The performance is greatly enhanced in effect by a full woodland echo. This was formally supposed to be the full extent of the Oven birds' full capacity, even Wilson, Audubon and Nuttall discovering nothing more; but when Mr. Burroughs, a sort of delightful dramatic observer, came into the field, he called attention to this bird's extatic song flight.

He says: "Mounting by easy flights to the top of the tallest tree, he launches into the air with a sort of suspended, hovering flight, like certain of the Finches, and bursts into a perfect ecstasy of song, clear, ringing, copious, rivalling the Goldfinches in vivacity, and the Linnets in melody. This strain is one of the rarest bits of bird melody to be heard, and is oftenest indulged in, late in the afternoon or after sundown."

This description is very accurate. I seldom heard this song, however, while in the north, but on coming to Maryland I found it to be a common ornithological entertainment. In the forest around my field, there is a pair located every few rods, and the beautiful song flight is a common occurrence about sunset or even on cloudy days, in fact I have heard it at about all hours of the night, and a beautiful song in the night is enough to endear any bird to the heart of the insomniast.

REV. J. H. LANGILLE, Kensington, Md.

THE ASIATIC MERLE.

In looking for old acquaintances among the feathered neighbors of China, it at first seemed that we had found *Merula migratoria* (American Robin) masquerading in a suit of black, so perfectly did actions and voice agree with our old friend, but upon closer inspection this new bird was found to be the Asiatic Merle, or Black Thrush.

The Merle is about the size of the American Robin, and of a uniform black color, with a bright yellow bill, and the tail somewhat fished.

The female is the same as the male except that the front parts have a tinge of rust color showing through the black, as though the transformation from the American Robin had not been quite complete.

Among the many sweet singers of the land of bird song, this bird is among the first. Though he may seem to be dressed in deep mourning, his rich clear voice will soon convince you that he has nothing to be sad about. Just at that uncertain time of the morning, when the watcher is unable to tell whether night is fading into day, and ere the

sun has been able to shoot his first finger of light into the sky above, the Merle awakens from his slumbers with a perfect flood of melody.

Perched in some near by tree, he prefaces his song with a few sharp shrill whistles as if to command silence from the other feathered songsters and then, as a master leader, he pours forth his sweet strains, awakening the stillness into life. His hours of song are not confined to the morning, but all through the day and late into the night his voice may be heard as he sits hidden somewhere in the densest foliage of the tree, trying to outdo himself in an ecstasy of song.

The habits of this specie are very similar to the American Robin. The food consists largely of worms and larvae which are taken from the ground. With drooping wings this bird may be seen stealthily creeping along or at other times imitating our old friend the robin, as he will run a little way and straighten himself up, but all the time he is intently listening for the unsuspecting larva or insect which is to make his meal. As is common with most birds of this class, he also feeds on berries and fruits in their season and seems to enjoy them immensely.

The nest of the Merle is placed in a vertical fork or perhaps, on a horizontal limb at a distance of from ten to forty feet from the ground and is composed of grass, leaves and vegetable fibres, lined with rootlets. This nest is very deeply cupped. The eggs are a pale olive green spotted, marked and blotched with various shades of brown, blue and burnt umber.

ERNEST B. CALDWELL.

[Although this magazine is especially devoted to our own birds, we are glad to have received the above article on the Asiatic form of our Robin, coming as it does from an American who is well acquainted with our birds, especially those of Tennessee, where he formerly resided. He has also favored us with an article comparing the bird life in far off China to that of this country. This we shall use a little later.

Mr. Harry R. Caldwell, well known to ornithologists in the U. S., and who has been in China the past year writes:—I am very much interested in China and find it one of the most beautiful countries in the world. The southern portion of it is a little Eden, a land of fruit and flowers. I doubt that God and Nature ever joined hands in the production of a drama more beautiful, or a country more “in tune with the Infinite” than this great country.” During the fifteen or more years spent by Mr. Caldwell with the birds of Tennessee, he has made many notes on their habits and we hope to draw from these from time to time. ED.]



BIRD CHATS WITH OUR YOUNG FRIENDS

Address communications for this department to

MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

To the boys and girls who read *AMERICAN ORNITHOLOGY*,—greeting: This magazine opens the new year with a special corner for the young folks. You have enjoyed its pages with the older people, but now we have a room by ourselves, we hope to become better acquainted with each other, and with our little brothers of the air. We hope that this department will help you to know the dress of the birds you meet in your everyday walks, their songs, and their habits, and thus to love more the beautiful things which God has given us to make us happier and better. So bring your questions and birding adventures, and talk them over with, Your friend,

MEG MERRYTHOUGHT.

A JANUARY PICNIC.

Hurrah, boys and girls. Who is ready for a picnic this bracing winter morning? A picnic in January? I hear you say. I never heard of a picnic with the mercury at zero. Who is to be there? Is it to be held around a blazing fireplace?

Nay, it is to be held under the great oak just beyond the house; there is a dashing brook, which Jack Frost has failed to chain, rushing down the hill in a field near by, and on its banks are still left some berries and seeds which our guests will enjoy. Of course the food is an important part of every picnic. Our bill of fare includes a large piece of suet tied to a branch of the oak, a head of ripened sunflower seeds, hung from the trunk. A meaty bone swung from another bough, well out of reach of the cat, and some crumbs and seeds scattered about on the ground beneath, while the clear waters of the brook ripple an invitation to all who are thirsty. Listen and you shall hear all about the party that gathered here yesterday, indeed there is hardly a day throughout the winter, but some of our little friends feast in the oak tree.



Photo from life by Everett E. Johnson.

"CHICKADEE-DEE."

First of all came a flock of Chickadees, warm as could be in their gray and white feather coats and black hoods, and singing: "Chickadee-dee-dee. Look under this tree. My thanks, friend, to thee." A Brown Creeper slipped around the trunk of the oak, and decided that a few bites of the suet would make a fine desert for his dinner of grubs. A downy woodpecker and his cousin hairy woodpecker, each in red caps, followed his example. There were sparrows galors running over the frozen crust; an occasional white-throated sparrow wearing a handsome hood with black, white, and yellow stripes, and pure white ties. Of course the English sparrows were there too, tho' they were not invited, nor were they wanted, and one dear little song sparrow flew down and called: "Maids, maids, maids, hang on your tea-kettle." Then a company of juncos in trim slate colored coats and gray white vests, appeared, seeming to rejoice in the frosty air; you will find them ready for a picnic every day. Those polite quakers, the cedar birds, the welcome nuthatch, blue jays, crows, goldfinches, and even a few belated robins and blue birds came, glad of a chance to supplement a scanty breakfast. These and many others daily enjoy the feast of good things spread out for them. If you cannot come to our January picnic under the oak, spread a similar table for the winter birds near your own home, and I am sure you will be more than repaid for your trouble.

SNOW BIRDS.

There is a disease called aphasia, in which a person is unable to speak the word he wishes. In giving an account of the Junco, I must have had a touch of that malady, for I find many important words have been left out, so I ask the help of the boys and girls to supply the missing words.

Take your pencils and see how well you can do. As I passed along one of the city streets not long ago, I found a dear little Junco lying dead upon the pavement. Perhaps in flying swiftly to escape a———, it had flown against a telephone wire. The bird was about —— inches long, its upper parts a ————— color, darkest —— neck, its lower ———— and ———— grayish white, forming a clear cut vest. The two outer tail feathers ——, and a —— also of creamy whiteness.

Almost any winter day you may see flocks of these cheery fellows swinging on the twigs above the snow drifts, and often plunging into the snow, for the seeds still left on many a weed stalk, with many whispered rippling twitterings. The Juncos are called chuck birds by the Swedes and snow birds by the English. They usually come to us the latter part of ————, and remain until late in ————. As you see this lively little winter friend, try to remember his whole name, junco hyemalis.

GLEANINGS.

The busy brown tree creeper traced the crannies of the grizzled oaks, the nuthatches followed, and their complaining squeaks seemed expressive of disappointment that so little food was found.—Abbott.

Not to have so much as a bowing acquaintance with the birds that nest in our gardens or under the very eaves of our house; that haunt our wood piles; keep our fruit trees free from slugs; waken us with their songs, and enliven our walks along the roadside and through the woods, seems to be, at least a breach of etiquette towards some of our most kindly disposed neighbors.—Neltje Blanchan.

THE CHICKADEE.

Dear little mite of woodland gray,
Whistling "phœbe" throughout the day.
Busily swinging from tree to tree
Calling so saucily, Chickadee-dee.

When wintry blasts doth blow on high
Chickadee-dee is right close by,
Cheerfully searching the trees with care,
For all of the insects hidden there.



EARLE STAFFORD (Age 14.)

Photo from life by Ev. E. Johnson.

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Photo from life by C. A. Reed.

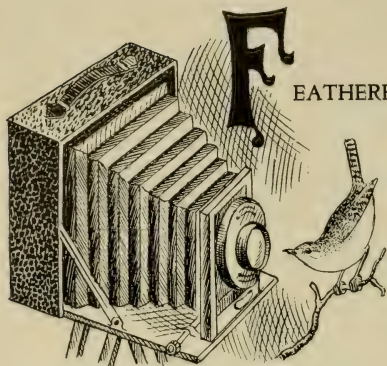
THE LITTLE ACROBAT.

Jennie Wren is as fussy as a house wren can be,
 Keeping Jack on the go, with no rest,
 He has looked high and low for the right kind of a tree
 In which they can locate their nest.

He has shown her the very best sites, in his search,
 In boxes, in sheds and nooks near the ground;
 A nice hole in an oak, beech, chestnut and birch,
 But nothing to suit can be found.

At last to the orchard with its fragrance so sweet
 The trees laden with blossoms so fine,
 He finds just what Jennie says is so neat
 And she knew where it was all the time."

—SELRAHC.



FEATHERED ACROBATS.

One bright sunny morning, during the latter part of May, I started out with the camera, intending to spend the day with the birds. As I was passing an old orchard, I heard the clear, unmistakable, rollicking song of the House Wren. Following this welcome guide, I soon found

him, perched on a dead twig, head up, and warbling as though his cup of happiness was bubbling over. There has always seemed to me to be something unusually attractive in the wren's song. It is no mere grandstand performance, but is expressive of his real feelings.



Photo from life.

As soon as he saw me approaching, his song stopped short and he uttered a sharp warning note. As if by some magic power, there appeared at his side, his exact counterpart. I stepped to the other side of the tree to see from where she came, and noticed a small hole in the end of a dead limb. Matters were getting interesting for me as well as

the little birds, who seemed very much excited and doubtless wished me anywhere except there. Despite their angry expostulations, I grasped the limb, drew myself up, and peered within the opening. There, upon a bed composed of twigs, and lined with hair and fine grasses, were nine small, finely speckled, pinkish eggs. Here was the cause of their present anxiety, as well as the male bird's previous jollity, which had betrayed his presence.

During the next two months, I visited this charming couple frequently, and when I came to know them better, designated her as "Jenny," and for want of a better name, called him "Jack." She soon became quite tame, and would enter or leave the nest, even when I was standing beside it. I think Jack must have been jealous, for he was always shy and scolded me when I came.



Photo from life.

The nest hole was barely above my head, and well lighted by the sun, in fact, it could not have been better situated for photographic purposes. While I was placing the camera in position, both birds were scolding incessantly. Jenny hopped to a twig about three-feet from me and, with her bill wide open, uttered continually a peculiar chattering sound, not unlike the buzzing of a swarm of bees. As soon as I withdrew a few

feet, all noise ceased, and Jenny immediately began to investigate. Jack, valiant bird, perched at a safe distance, and gave all manner of encouraging notes, and even scolded her for not going at once to the nest, but he himself showed no inclination to do so. Of course it would not do for him to get into danger, for if anything should happen to him, what would become of Mrs. Wren? Jenny approached nearer and nearer the hole, and at last suddenly dashed in. Seeing that nothing unusual happened, Jack took courage and came slipping and sliding down the tree trunk in a ludicrous fashion until finally he stood on top of the nest hole. Peeking in, he gave a querulous call that was immediately answered from within. Evidently the response pleased Jack, for he at once launched himself into the air and sailed proudly to the next tree, singing the sweetest melody that he could compose.

This day I secured six exposures, but the verdict of the dark room allowed me but one good negative, that of the male bird standing head downwards, just looking into the nest. The chief difficulty in securing pictures of these birds was not that they were afraid to return to the nest, as is often the case with other birds, but that they were too active. When several of the exposures were made, the birds were moving at such speed that, although the exposure was only one one-hundredth part of a second, the bird showed only as a streak extending across the plate.

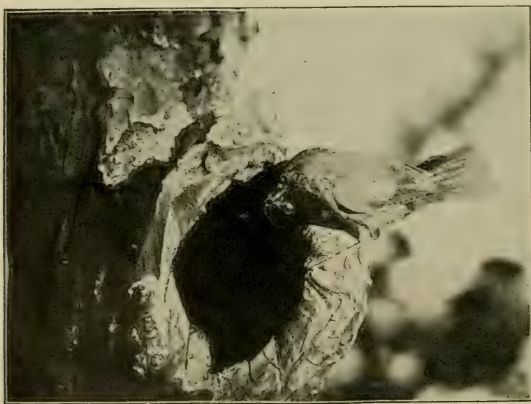


Photo from life.

On my next visit, several days later, I was surprised to see that they were apparently repairing the nest. I looked in and—there was not an

egg there. Someone had found the nest and robbed it of its treasures, but evidently the wrens had ceased mourning their loss and were preparing to try again. When next I saw the nest, about two weeks later, I was delighted to find that it contained eight eggs, and once more Jack was the proudest of birds.

Business now kept me away from their home for a number of days, but when I called again, their happy thrills assured me, before I reached the orchard, that they had not been molested a second time. It seemed to me that they were unusually busy, for they were continually flitting from the tree to the ground and back, and did not notice me until I reached the nest. When I looked in the cause of their activity was apparent, for the eight eggs had been transformed into eight little baby wrens, each with an appetite all out of proportion to its size. They were not fastidious in the least, as their bill of fare included spiders, ants, small wasps, caterpillars and many other insects. During the next few days, Mrs. Wren caused me considerable trouble by flying directly into the nest, instead of alighting outside so that I might photograph her.



Photo from life.

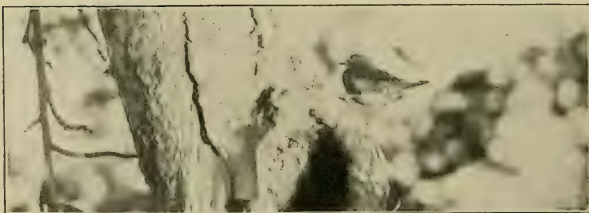
From now on, affairs progressed rapidly at the nest and soon the little ones were feathered out and were very noisy. Their chattering, coming from the depths of the tree, had a peculiar sound and it would have puzzled anyone, not knowing where they were, to have located them. They were also becoming quite active, and when they heard their parents coming, would all rush to the entrance to get the first bit of food.

Two days later, I tapped on the limb and out flew eight young wrens. It was their maiden attempt at flying; some landed on the ground, some on the trunks of neighboring trees, and one or two managed to alight on twigs, where they swayed to and fro in the endeavor to maintain their balance.

The next day Jack was very busy going the rounds to feed his numerous children. To my surprise, however, Jenny was at work renovating the old nest, and before another month had passed, had successfully reared another brood of eight. These wrens proved to be a very thrifty pair, having reared sixteen young besides having nine eggs stolen.

I passed many very pleasant hours watching them and was sorry to see them leave in the fall, but I shall look for a large wren population in the same orchard, next year.

CHESTER A. REED.



"GOOD BYE."

Photo from life.

WHITE-WINGED CROSSBILL.

A. O. U. No. 522.

(Loxia leucoptera.)

RANGE.

Found in the northern parts of North America; south in winter to the middle portions of the United States. They breed from the northern parts of the United States northwards.

DESCRIPTION.

Length, about 6 in.; extent, 11.5 in.; tail, 2.5 in. Eye, brown. Bill and feet brown. Both mandibles are rather large at the base, but rapidly become slender towards the point, the upper being curved downwards and to one side, while the lower mandible is curved upwards and to the opposite side. Male, general color a bright rosy red, somewhat obscured by brownish on the back and changing to whitish on the belly. Wings and tail, black, the outer webs of the feathers of each being edged with rosy. The secondaries and wing coverts are broadly tipped with white; these two wing bars sometimes overlap and form one large wing patch.

The tail is somewhat forked. Female:—General color a yellowish olive, changing to a bright yellow ochre on the rump. Both above and below, with the exception of the rump, they are streaked with dull brownish. Both sexes vary greatly in the coloration, some being very bright, while others show little color.

NEST AND EGGS.

It cannot be stated with certainty just what localities the White-winged Crossbills will nest in each year. Their movements are very unreliable and places where they nest one year may not see a single individual the next. They may be met with breeding throughout any of the northern tier of states and the whole of Canada and Alaska. They are



very early breeders and their nests have been found with sets from the middle of January to June. They build their nest at heights varying from ten feet to the tops of the tallest trees. It is generally placed on a horizontal branch at its junction with the main trunk, and is a good sized, flat structure made of small twigs, straw, moss and lichens, generally with some attempt to imitate the coloration of the bark on the tree in which it is placed. They lay three or four pale bluish eggs sparsely spotted at the larger end with black and lilac.



WHITE-WINGED CROSSBILLS.

HABITS.



THE most striking feature about this interesting species of birds is the odd shape of their bills, from which their name is taken. It would seem that a bill of such peculiar design would prove very inconvenient to the owner at feeding time, but, however, strange it may appear to us, they are very skillful in opening pine cones, apples and other articles that form their diet, and to them it is probably as useful as it appears odd to us. During the winter quite large flocks of Crossbills come from Canada and rove about the country as far south as the middle portions of the United States. They are as irregular in their occurrence in any one locality as they are erratic in their flight. With most birds you can depend upon finding them in some particular section of the country at a certain season of the year, but not so with the Crossbills. One season they may be very abundant in a certain locality and then not be seen there again for several years.

When present in a place they are continually wandering aimlessly about, and their destination seems to be as little known to themselves as it is to the observer. Frequently I have watched a flock flying swiftly overhead with their characteristic undulatory flight, apparently bound for the next county or even farther. Suddenly, as if the entire flock were controlled by one mind, they all speed downward and alight in the top of a nearby pine. Whether they fly under the leadership of one individual or each one for himself, they are exceedingly well drilled, for no military organization could execute the manouvers through which they go with equal speed and precision.

They respond very readily to a crude imitation of the continuous chattering whistle that they utter while in flight, but are ever restless when in the tree tops, and at some fancied danger the whole flock will rise as one bird, and, after a very round about course will, in all likelihood, alight in the same tree from which they started. Unless some sudden move is made to startle them they are very tame and pay little attention to observers. A small clump of pine not far from home is a favorite locality for them to occupy if any are in the neighborhood. In late fall and winter, they are often found here in company with the American Red Crossbills. Probably a small pond-hole in the midst of the grove has much to do with the popularity of the place, for these birds often like to quench their thirst while feeding.

Often have I called, by imitation, a passing flock of these strange bil-

led creatures, and had the satisfaction of seeing them alight in the tops of the pines. After a few minutes they commence to move about, and soon a snapping sound, accompanied by a shower of pieces and even whole cones, announces that they are busily engaged. While feeding they do not utter the loud peculiar notes which mark their flight, but often a strange humming or chattering sound comes from the tops of the trees, as though they were holding a conversation among themselves in a low tone. Standing on, or hanging from one of the cones they insert their crossed mandibles and with a single twist of the head force the cone apart. It makes little difference to them as regards their position when eating their meals. As often as not they will be seen head down, hanging from the branches. Their movements are slow and deliberate and they use their bills in conjunction with their feet for hanging to the branches as they clamber about. Gradually, as I have watched, they have been working their way towards the ground, and soon one flies down beside the pool. Others follow and soon the carpet of brown pine needles presents a handsome appearance, being dotted here and there with the reddish colored forms of the males and the yellow ones of the females, the wing bars of the white-winged varieties showing, in marked contrast, against the dark surroundings. At such times I have quietly approached them and their little fear of man is shown by the fact that often I have had my hand within a few inches of them before they hopped a few feet farther away. As long as a person's movements are quiet and deliberate, they exhibit no concern, but let a single quick motion be made and the whole flock will take wing instantly.

NORTHERN SHRIKE.

A. O. U. No. 621.

(*Lanius borealis*.)

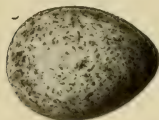
RANGE.

Northern North America, breeding north of the United States. In winter it migrates south to the middle portions of the United States, from the Atlantic to the Pacific.

DESCRIPTION.

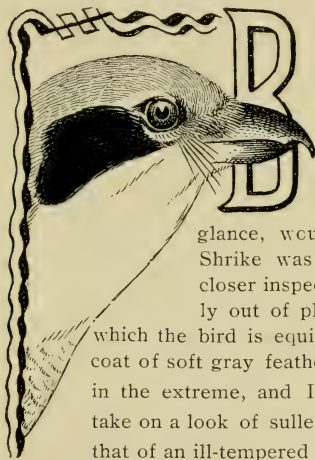
Length, 9.5 in.; extent, about 14 in.; tail, 5.5 in. Eye, dark brown. Bill and feet, blue black. Upper parts a bluish gray, lightening in the crown, rump and sides of the back. Below light gray, the breast and belly being crossed with wavy, darker gray lines. Wings and tail, black, the former with a large white spot near the base of the primaries, and tips of most of the secondaries white, the latter with outer web of outer feather and tips of the remaining outer ones, white. A broad black bar extends from bill along the side of the head. A small white crescent on the under eyelid. Young birds of the year lack the wavy lines on the under parts; the upper parts are a uniform gray, and the wings and tail are of a brownish color.

NEST AND EGGS.



The lower portion of this Shrike's nest is mainly of sticks thrown loosely together. The remainder is a combination of twigs, grasses, strips of bark and feathers. This nest is placed in hedges or thickets, often near dwellings or in isolated bushes in a field bordering some piece of woodland. During May, they lay from four to six grayish or pale greenish colored eggs, thickly spotted with brownish and greenish markings.

HABITS.



IRDS are subject to as great differences in disposition as are human beings. Some are shy and retiring, others bold and aggressive; some quiet and unobtrusive, others loud and boisterous. The subject of this sketch is one of the oddities of the bird world. A casual observer, at a glance, would remark that from appearance the Shrike was a peaceable, law-abiding bird. A closer inspection reveals a hooked beak seemingly out of place, when the sparrowlike feet with which the bird is equipped, are considered. Beneath their coat of soft gray feathers, lies a nature, cruel and cunning in the extreme, and I have seen their sharp brown eyes take on a look of sullen determination, comparable only to that of an ill-tempered bulldog.

While in their summer home in Canada, their food consists almost wholly of mice, grasshoppers and beetles, and the good they do is inestimable. Unfortunately for the good of their reputation, they are only seen in the United States during the cold of winter, when lack of food causes them to fall into line and come south with the other migrating birds. At this season of the year, their diet is mostly made up of what small birds they can capture, and their manner of serving them for dinner has given them the unenviable name of "Butcher-bird."

Owing to the character of their feet, they are unable to hold their prey firmly, when tearing it to pieces. To take the place of the talons,



NORTHERN SHRIKE.

which they lack, the Shrikes make use of broken off twigs, thorns or any projection that will assist them in holding the bird they are about to "butcher." I once watched one for some time, while he was making a meal from a sparrow that he had recently captured. He was evidently one of the smart members of the family, and had appropriated for his own use, one of man's important inventions. He was perched on the top of a fence post and had tried to catch the sparrow on the barbs of a barb-wire fence. The spikes were not long enough to serve his purpose very effectually, and the bird continually fell off, sometimes on one side of the fence and again on the other. Each time he would hop to the ground and carry it back, until finally after much manouvering, nothing remained but a few scattering feathers.

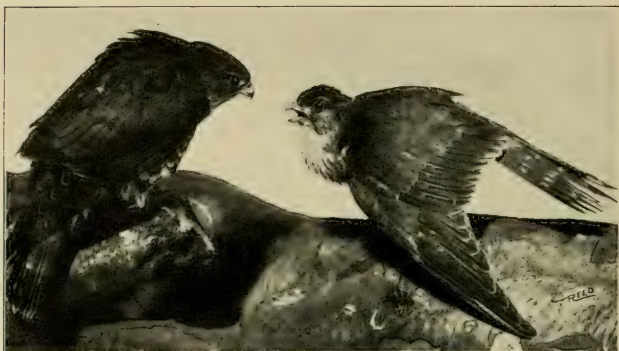
Although there is much left to be desired in their manner of living, especially during the winter, they are not nearly as black as frequently painted and the tales often seen in print to the effect that the Shrike slaughters numerous birds and leaves their remains impaled upon thorn bushes, merely for sport, may be read doubtfully.

It is a strange fact that few of the birds that subsist to any extent upon flesh, are gifted with the power of singing. The Northern Shrike is an exception and many a so-called song bird cannot successfully compete with him in vocal ability. His song is very varied and he has the power of imitating many of the common birds, a power that he uses to good advantage in luring his victims to within his reach. He has a remarkably clear whistle and if placed under the instruction of a skillful teacher would make a wonderful musician. In the uneducated state that he must remain, his song is frequently broken by creakings, croakings, cat-calls, and squawks as though he was unable to control his wild nature in the ecstasy of song.

Whatever may be said against the Shrike, it will be admitted by all who know him, that no more courageous or audacious bird is to be found in the whole country, than he. Many instances have been recorded, in which they have entered houses, through an open window, and attempted to attack a canary whose cage hung in sight. A number of times I have had Shrikes brought to me that were captured alive. They had pounced upon some English sparrow in the street and rather than relinquish their prize, have suffered themselves to be picked up, together with their quarry. Even after being captured they will continue to finish their meal if permitted to do so, paying no apparent regard to their captors.

Often times they secure their prey by darting from a lookout after the passing bird in the manner of the small hawks. More frequently they will conceal themselves in some convenient shrubbery, even in the vines that cover some of the city houses, and by imitating the cry of a bird in distress, cause other birds to come to the rescue and thus become the victims. I think we will all admire this bold fearless individual, and doubtless if we knew him in his summer quarters, we would be ready to condone with him for his winter depredations.

?



WHICH IS WHICH?

The above illustration is from a photograph of two pigeon hawks. One of them is a live bird and the other is a mounted specimen. Can you pick out the live bird? This picture is one of a series taken of this little hawk, and we have been considerably amused by the attempts of those who have seen them, to locate the one that is alive. As the score now stands, about nine out of every ten have decided that the mounted bird is the live one, and we concluded that possibly many of our subscribers might like to judge for themselves before we announce which is the real bird. The story of this hawk in captivity will be given in the next number.

We should like to have all those who think that they can tell, to mail us a card stating which of the two birds, the right or left hand one, is alive.

Identification Color Chart No. 1.

Birds conspicuously marked with yellow about the head, **Black Throats**.



A. O. U. No: 666, Golden-cheeked Warbler,
(*Dendroica chrysoparia*).

Range in the U. S. limited to southern Texas. Rare. Length, 4.5 in. Entire back, wings, and tail, black. Yellow only on cheek and line on top of head. White wing bars. Inner webs of outer tail feathers, white. Below white. Nest in cedar trees.

A. O. U. No. 667, Black-throated Green Warbler,
(*Dendroica virens*)

N. A. east of the Plains and south of Hudson Bay. Common. Found most often in fir trees where it nests. Length, 4.5 in. Top of head and back, greenish yellow. White wing bars and outer tail feathers. Female has the black of the throat indistinct and mixed with yellow.

A. O. U. No. 668, Townsend's Warbler. (*Dendroica townsendi*.)

N. A. chiefly west of the Rocky Mountains. Quite common. Breeds in coniferous trees. Length, 4.5 inches. Top of head and cheek, black. Back, greenish marked with black spots. Breast and sides yellow. White wing bars and tail feathers. Female paler and black indistinct.

A. O. U. No. 669, Hermit Warbler, (*Dendroica occidentalis*)

U. S. west of the Rockies and south of Canada. Not common. Length, 4.5 inches. Breeds in pine trees. Entire head, yellow. Back, gray spotted with black. Under parts white. White wing bars and outer tail feathers. Black throat on the female partly replaced with yellow, and head blotched with dusky.

A. O. U. No. 684, Hooded Warbler, (*Sylvania mitrata*.)

U. S. east of the Plains and south of the Great Lakes. Common. Length 5 inches. A ground warbler and nests on the ground. Very active. Catches insects on the wing, like flycatchers. Cheek, forehead, and under parts, yellow. Black of throat meets that on top of head. Back, wings, and tail, greenish. No wing bars, but outer tail feathers are white.

Birds with unmarked Yellow Throats.**A. O. U. No. 663, Yellow-throated Warbler. (*Dendroica dominica*.)**

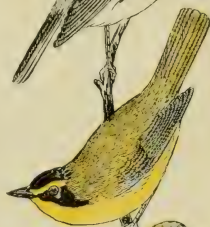
Common in the Atlantic States, chiefly south of New England. Length, 5 inches. Nests in pine trees. Top of head and back, gray. Black of forehead separated from black cheek by white line over eye. Under parts white. White wing bars and outer tail feathers. Sub-species:—No. 663a. Sycamore Warbler. (*D. dominica albilora*). A lighter form of above, found in the Mississippi valley and west to the Plains.

**A. O. U. No. 664, Grace's Warbler, (*Dendroica graciae*)**

Southern New Mexico and Arizona. Rare. Nests in pines. Length, 4.5 inches. Yellow of throat extends around eye. Gray crown edged with black. Black spots in middle of gray back. White wing bars and outer tail feathers.

**A. O. U. No. 677, Kentucky Warbler, (*Geothlypis formosa*.)**

Middle and southern parts of U. S. east of the Plains. Common. A ground warbler, nesting on ground in woods. Length, 5.5 inches. Yellow stripe over eye separates black crown from black cheek. Back, wings, and tail, greenish unmarked. Below yellow.

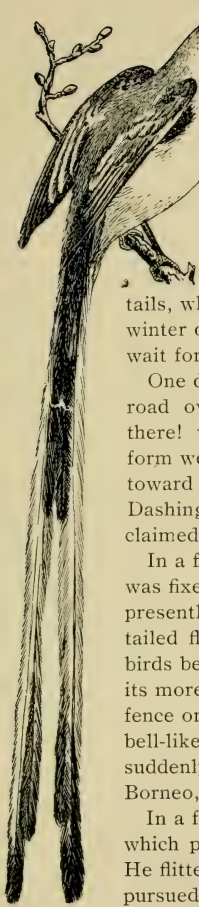
**A. O. U. No. 681, Maryland Yellow-throat, (*Geothlypis trichas*.)**

Eastern U. S. and southeastern Canada. Very common. Nest on ground. Length, 5 inches. Black mask around eye extending across forehead. Greenish back and tail, unmarked. Female without black mask. Sub-species;—No. 681a,—West Yellowthroat (*G. t. occidentalis*) U. S. west of Mississippi valley. No. 681b. Fla. Yellow-throat (*G. t. ignota*) Fla. and southern Ga. No. 682 Belding's Yellow-throat (*G. beldingi*) Lower Calif. No. 682, 1 Rio Grande Yellow-throat. (*G. poliocephala ralphi*) Rio Grande Valley.

**A. O. U. No. 683, Yellow-breasted Chat, (*Icteria virens*.)**

U. S. east of the Plains. Very common, noisy and mimical. Nest on ground in thicket. Length, 7.5 inches. Black spot below and in front of eye. Crown and cheek, gray. Back, greenish unmarked. Sub-species;—No. 683a. Long-tailed Chat. (*I. V. longicauda*) U. S. west of Plains and south of British Columbia.





A HANDSOME SCISSOR-TAIL.

BY LEANDER S. KEYSER.

In order to study the scissor-tailed flycatcher (*Milvulus forficatus*), of which some friends had told me again and again in a glow of enthusiasm, I made a trip to southern Kansas and northern Oklahoma. Several days passed before an individual of this species put in appearance, as the scissor-tails, which are migrants, were just returning from their winter quarters in a more southern clime, and so I had to wait for their arrival.

One day a friend and I were driving along a country road over the broad prairie, when he exclaimed, "See there! what bird is that?" Sure enough, a quaint bird form went swinging from the wire fence by the road-side toward a clump of willows in a shallow dip of the prairie. Dashing after him, I heard a clear, musical call that proclaimed a bird with which I had not yet made acquaintance.

In a few moments he flew from the tree. My binocular was fixed upon him as he went flitting across the field and presently alighted on the ground. It was the scissor-tailed flycatcher, one of the most unique and handsome birds belonging to our American avi-fauna, one that merits more than a passing notice. To see him perched on a fence or swinging gracefully through the air, and hear his bell-like calls and whistles, makes you feel as if you were suddenly transported to a foreign land, like Australia or Borneo, where so many feathered curios are to be found.

In a fever of excitement I followed the beautiful bird, which presently flew back to the fence by the roadside. He flitted from point to point as my friend and I slowly pursued him, giving us an exhibition of his scissoring process. Sometimes he would alight on a post, and then on the barbed wire, usually sitting flat on his breast, when open the tail is bi-colored, the outer border all around being white and the inner black. The effect is quite picturesque. His general color is hoary ash, paler or almost white below, giving out a slight iridescence in the sunshine; his wings are blackish, with white trimmings; while his flanks are washed with salmon-red, and when his wings are spread, there appears

a large blotch of scarlet at the inner angle of intersection with the body. One individual afterward seen wore a scarlet epaulet, which was almost concealed by the other plumes when the wing was closed, but was clearly visible when it was extended. An orange or scarlet gem adorns the crown, but is so well hidden by the other crest feathers that it is seldom noticed.

My friend and I were privileged to witness a rare and attractive scissor-tail show, more gratifying than any human trapeze performance. A loggerhead shrike suddenly appeared on the scene, and made an assault on the flycatcher, and then the two birds went gyrating, zigzagging, seesawing through the air in a perfect jumble of white and black and ash. It must be remembered that the shrike himself makes a handsome picture on the wing, and when you come to mix up a scissor-tail and a shrike in an inextricable confusion of colors, you have a feathery display worth seeing,

Nor was that the end of the performance, for in a moment a second-scissor-tail, the precise *fac-simile* of the first; appeared from somewhere, and then the two flycatchers combined against their enemy, and for a few minutes there was such a chaos of shrike and scissor-tail that the excited spectators could hardly distinguish between them. By and by the shrike wheeled away, when, as if to bring the gladiatorial show to a climax, the scissor-tails engaged in a setto that was really wonderful, coming together in the air, whirling around and around, rising in a spiral course, opening and closing their beautiful forked tails in quick succession, the black and white trimmings flashing momentarily and then disappearing, until the contestants finally descended, parted in the most graceful manner, and alighted on separate fence-posts, none the worse for their exciting *melee*.

In the evening I returned to the enchanted spot, but the scissor-tails had disappeared. Not having had my fill of these charmers, I stopped, on my return home, for a day at Wellington, Kansas, where I was so fortunate as to find three birds of this species, who permitted me to watch them to my heart's content. They are not shy birds, but fly in a graceful, leisurely way from post to post along the fence as you walk or drive, sometimes sitting quiet to let you pass by. In this respect their habits are much like those of their cousin, the bee martin.

As his name indicates, our bird is the proud possessor of a genuine scissor-tail. That appendage is divided into two long, slender prongs, which are spread far apart under certain conditions of flight. Let me describe the process minutely, for it is unique, especially here in North America where fork-tailed birds are rare.

When the bird starts from a perch, he spreads apart the prongs of his

tail for a moment, as if to give himself a spring; then he closes them into a single slender pole, tapering outward to a point, keeping them closed during prolonged flight, and then, just as he sweeps down to another perch, he opens his ornamental scissors again, shutting them up as soon as he has settled upon his resting place. He does not open and close his tail at regular intervals, as might be supposed, during flight, but keeps it closed until he descends to a perch, when it is opened for a moment in the act of alighting. However, if he has occasion to wheel or make a sudden turn in the air, either for an insect or for some other cause, his scissors fly open, one might almost say spontaneously, no doubt serving the double purpose of a rudder and a two-part balancing-pole. When closed, the tail is very narrow, looking almost like a single plume. On the perch (except when he desires to shift his position, when he also makes use of his wings) his tail is closed. Therefore the picture of this bird in Dr. Coue's "Key to North American Birds" is not accurate, for it represents our bird as sitting on a perch with the tines of his fork spread apart. If the wings were outstretched, representing the bird in the act of alighting or shifting his position, the picture would be true to life.

The range of these birds is somewhat restricted, and for that reason, doubtless, so little is known about their habits. According to Ridgway, their proper home is in eastern Mexico and the south-western prairie districts of the United States, though many of them come north as far as southern Kansas and south-western Missouri to spend the summer and rear their families. In winter they go as far south as Costa Rico. Restricted as their habitat is, it is curious to note that they are "accidental" in a few unexpected places, such as Key West, Fla., Norfolk, Va., and also in several localities in New England, Manitoba and Hudson's Bay Territory. Prof. W. W. Cooke, of Colorado, says they are "rare, if not accidental" in that state. To show that our birds are unique, it is relevant to say that there are only two species of scissor-tailed flycatchers in North America, constituting the Genus *Milvulus* all to themselves. The other member of the genus is the fork-tailed flycatcher (*Milvulus tyrannus*.) which is a resident of tropical America, migrating north normally as far as southern Mexico. He is a sort of southern twin of our scissor-tail.

The nests of the scissor-tails are set in the crotches of trees in the neighborhood of country homes on the prairie. Considering the size of the birds, their nests are quite small, not as large as the brown thrasher's, although the cup is deeper and the architecture more compact and elaborate. A friend describes a nest which he found on a locust tree about sixteen feet from the ground. It was made mostly of

dry grass and locust blossoms, with here and there a piece of twine braided into the structure. It had no special lining, but the grass was more evenly woven on the inside of the cup than elsewhere.

From three to five eggs are deposited. The ground color is white, either pure or creamy, sparingly mottled with rich madder-brown and lilac-gray, the spots being thicker and larger on the larger end. While the nest is undergoing examination, the owners circle and hover overhead, much after the fashion of the red-winged blackbirds, and express their disapproval in loud and musical calls, displaying their rich scarlet decorations.

My descriptions have all related only to the male bird, whose beautiful forked tail is nine to ten inches long, and whose colors are clear and more or less intense. His spouse resembles him, but is slightly smaller, while her tail, though forked like her mate's, is from two and a half to three inches shorter. The salmon and scarlet ornaments on the sides flanks and axillars are paler than those of her lord, and the crown-spot shows very indistinctly on her occiput. The young don the dress of the mother bird, save that they fail to adorn themselves with a scarlet gem on the crown.

Like all the members of the flycatcher group, the scissor-tails capture insects on the wing, making many an elegant picture as they perform their evolutions in the air.

BLUE-WINGED WARBLER.

A. O. U. No. 641.

(*Helminthophila pinus*)

RANGE.

Eastern United States, from southern New-England, Southern New York and Minnesota, southwards and west to Nebraska and Texas.

DESCRIPTION.

Length 4.5 in.; extent, 7.5 in.; tail 2 in.; eye brown; lids, yellow; bill and feet black. Above olive green, brightest on the rump. Fore part of crown and the under parts, a bright yellow. wings and tail bluish-gray. There are two white bands on the wing and the inner webs of the three outer tail feathers are mostly white, as are the under tail coverts. A black line extends from the base of the bill through the eye and to the cheek. The female differs but little in plumage, chiefly in the crown which is a dull yellow.

NEST AND EGGS.

They generally select an open place in a clump of brush, or on the edge of woods that contain a growth of rank grass or golden rod; sometimes at the foot of a single sprout, but more often hidden in the rank



BLUE-WINGED WARBLER.

grass or golden rod. I have found them beside cart paths, roads in fields near woods, in the woods on tussocks of grass, and in low, damp but not wet places; in fact most everywhere, but only where those familiar would look for them.



The nest is composed of dried oak or chestnut leaves as a foundation, placed in such a way that they point up, forming a cup shaped affair, This contains the nest proper, which is made of long strips of grape vine bark and grass, running up and down and forming the letter U. The lining is composed of very fine strips of the same, fine grass, and sometimes a few hairs. This is not always the rule, as I have found them made entirely of ribbon-like grass, finer grasses and green bark, and lined with fine grasses, resembling a nest of the yellow throat. I have found nests measuring 6 in. high and 4 in. wide; again, only 3 in. high and 3 in. wide, and with leaves covering the top, so that nothing but the birds head could be seen.

The eggs vary greatly in size and markings. Some of the markings are of a black tint, others of a brown, some few have no markings, some are well covered, and others have bold splashes. I have found one set so heavily marked, that it resembles a set of Magnolia Warblers.

HABITS.

Here in Fairfield county, Connecticut, the blue-wing Warblers, though not abundant, may be called common.

About the first week in May you will hear the insect like song of the male, while feeding with the female; the second week you will find them busily engaged in building.

Soon after they arrive here, they will be found about the orchards that are in full bloom, but later they are rarely seen about dwellings.

June first you will find complete sets, though dates will change according to seasons, the average set being five, very often four and rarely six. The largest set I have ever seen was found by Mr. Beer of this city, contained six eggs, and one of the cowbird. The cowbirds destroy a great many nests by laying in them before the rightful owner, who will then leave it and build another nest. In these cases they seldom lay more than four eggs. When the cowbirds lay after the blue-wing has laid two or more eggs, they seldom leave the nest, but if only one egg has been laid, they desert at once. You will seldom find a nest containing a cowbird, and more than four eggs of the owner. This

year we found several nests containing two and three eggs, and in all cases it was all the birds had laid, as we had found the nest without eggs.

A nest should never be touched unless the set is complete, and above all a new nest, for they are very peculiar and will desert at the least disturbance.

To those unable to find the nest, a point; the male has a route from tree to tree that he follows, singing his love song in each; along this route the female is sitting, and when he flies over, you will see him dip down and sometimes alight; now is your opportunity; go directly to the spot and begin your search. The female is a close setter and will let you almost touch her before she will leave, and then slides off of the nest. When you have found the nest, you will wonder how it is; you have never found them before, they are so large.

J. B. CANFIELD, Bridgeport, Conn.



Photo by F. L. Rawson.

NEST OF BLUE-WING WARBLER.

BLACK-BELLIED PLOVER.

A. O. U. No. 270.

(Charadrius squatarola.)

RANGE.

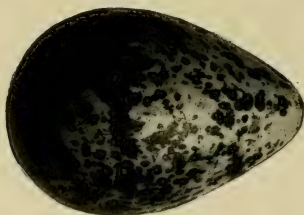
This Plover breeds in the extreme northern portions of North America. It migrates in winter south of the United States.

DESCRIPTION.

Length, 11.5 in.; extent, 24 in.; tail, 3 in. Eye, brown. Bill and feet, black. Has four toes, the hind one being very small, but serving to distinguish it from the similar Golden Plover, which has but three toes. Adult in summer:—Chin, throat, breast, under parts and sides of the head, black. Top of the head and sides of the neck, white, the feathers on the hind part of the crown being centered with black. Back, wings and tail, black, the feathers of the back being edged with white and the secondaries, coverts and tail feathers barred with the same. Under tail coverts, white. Auxillary feathers (those under the wing and nearest the body), black. These feathers also serve to distinguish these birds in the winter plumage from the Golden Plover, these same feathers on the latter bird being white.

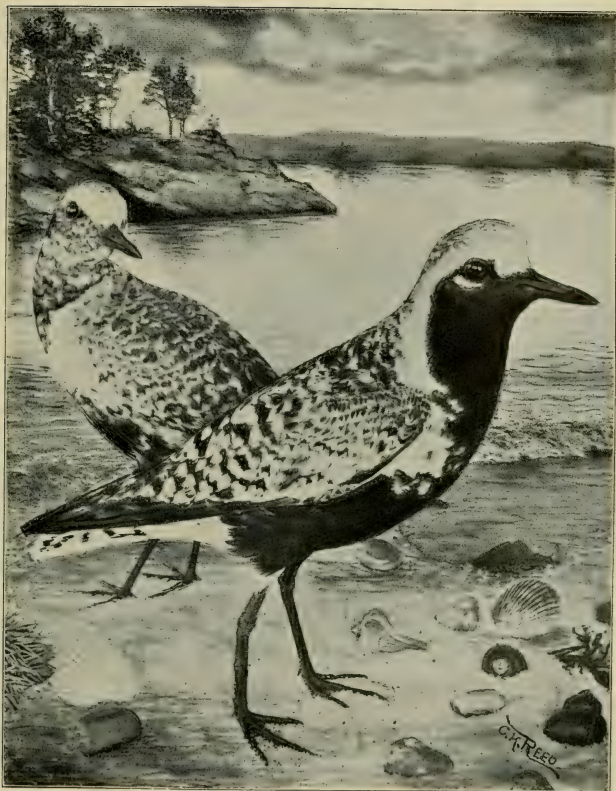
NEST AND EGGS.

The Black-bellied Plover nests in the extreme northern parts of N.A. The nest is simply a depression in the ground, and is lined with a few grasses. The three or four eggs are laid during the latter part of June or early in July. The ground color varies from a light to a deep olive buff, thickly spotted and blotched with umber and black of varying patterns.



HABITS.

The Black-bellied Plover is decidedly more a bird of the sea shore and mud-flats than one of the interior, and with the exception of along the Mississippi valley, the greater part of them during migrations follow along down the coast lines. When in their spring dress, few of the



BLACK-BELLIED PLOVER.

plover family can compare with them in point of beauty. Their form is quite stout and the head is larger compared to the size of the body than that of other plovers.

Few naturalists have observed the domestic life of this species in America, owing to their extreme range. The same plover is found in Europe and there is known as the Grey Plover. According to Mr. Seebohm, who has made careful observations of their breeding habits, their nests are very difficult to find and it is necessary to watch the birds closely for a long time before they reveal its location. The female seldom takes wing when she approaches the nest and is very cautious, and if she is not entirely satisfied that all is safe, will pass and repass the nest before finally settling upon it. She is very restless and continually moves from one post of observation to another, while the male quietly stands upon the tussock of a ridge and watches her.

After the old birds have moulted, they, accompanied by their young, leave for the south. The old birds have now lost their beautiful black under parts and look similar to the young. After their summer in the uninhabited north, and their long tiresome flight, both the old and young birds have lost the wariness, and at every feeding place at which they stop, as they pass through the civilized country, they are made the targets of the hunters. These latter consider the plovers only as so much flesh, and at the close of the day's shooting, their score records the fact that they shot so many "Beetleheads" or "Bullheads" as they call them.

These birds are remarkable travellers, many of them traversing the entire length of the two continents and wintering in southern South America. During March and April they don their black suits again and start on their long journey towards the north. Remembering their fall reception, they are very shy now and are much more difficult to call to the decoys than the Golden plovers. They fly most frequently in small flocks of perhaps six to ten individuals, although occasionally as many as forty are reported.

Their call note is quite difficult to imitate, which fact, perhaps, partly accounts for their aversion of being decoyed. It consists of a peculiar whistle, and possibly may be expressed by the three syllables "Cl-ee up." Their food consists of marine insects and shells, which they find on the flats left bare by the receding tide, and various beetles, which they obtain in the adjacent meadows. Their flight is very strong and swift. Upon alighting upon the shore they have the same graceful habit as many of the other plovers, that of raising their wings over the back and disclosing the beautiful markings.



Address communications for this department to

MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

DEAR LITTLE FRIENDS:

Again, good morning to you all. How many of you can tell the length of the English sparrow? Read in our Gleanings this month what Dr. Van Dyke says of him. I wonder if you can tell why he has such a bad name. I am sure some of you can tell something good about him. I should like to hear from you on both sides of the question.

Well, good or bad, he is such a well known little scamp that he is a good standard of measurement; so when you meet an unknown bird, think how much longer or shorter he is than the English sparrow, (five inches) and it may help you to name him. This is a fine time to begin to learn the birds, there are so few that you can fix their names firmly in your mind before spring fills the woods with gay visitors.

The first necessity in making the acquaintance of our bird neighbors is patience, the second is more patience. Begin your quest with a large stock of patience, with a real love for the birds, note carefully the colors, the size, shape, the manner of flight, of perching, of feeding, etc., and you will soon make many friends which will fill every walk with pleasure. Who can tell the name of the bird, which, when disturbed, carries its little ones by the nape of the neck, just as puss carries her kittens? Hoping that little February will bring you new friends in the fields, I will bid you good bye till March. Your friend,

MEG MERRYTHOUGHT.

SOME WINTER NESTS.

Do you know how many nice things there are in the woods in February, waiting for us? Now that the trees are bare, each one showing its outline so clearly against the blue sky, we shall find disclosed many a nest which was so carefully woven and tightly wound to the branches that the fierce winter winds failed to loosen it. Now we can see how

and of what these homes are built, without fear of disturbing the owners. Doubtless we shall find more of the little gray cups in which the baby vireos have been rocked than of any other nests at this time. I have one before me that a red-eyed vireo swung last summer between the forked branches of a young oak, beneath a green leaf umbrella.

It is a wonderful little cradle. You or I, with ten fingers and a heap full of gray matter to direct them, could not form the like.

How many miles the old birds must have gone in their search for the fibres and down to build it! We find in it plant fibres, cobwebs, bits of roots, leaves, cocoons, decayed wood, scraps from hornets' nests, and, as-usual, some bits of news paper; for the vireos usually place good reading within reach of their little ones.

No doubt we shall find many mud huts of the robins, and the similar homes of the Wood Thrush, nearer the ground. The wonderfully woven pockets of the Orioles still swing from many an elm, and you may find a deserted bird tenement which has been rented for a winter nursery by a family of field mice. If we put our hands in the deserted home of the woodpecker we may find a lining of snake skins. The Great-crested Flycatcher is said to always use a snake skin to upholster its nest.

It is too late to find the dainty flat nest of the Pewee, shingled with gray lichens, or the Dutch oven of the Oven-bird, and the rough structure of twigs thrown together by the crows, the Cuckoos, and the Green Herons have long ago fallen apart. Nor would a search earlier in the season have shown you the nests of the Nighthawk or the Whip-poor-will, for they simply camp out on a gray rock or mossy hollow. I think you could make a long list of the materials used in the nests you might find in a winter's walk—moss, wool, seed pods, feathers, gum, rags, catkins, the hair of various animals—but you may complete the list, I know you can add many to it. But we speak of the "bird homes." They were but the homes of the baby birds. Do not think of the nest of a bird as a home where it returns to sleep at night. O, no; you will find the full grown bird at night fall, holding tightly by one foot to a branch in some high tree top, with its feathers fluffed out like a great puff ball, and its head snugly tucked beneath its wing, motionless until reminded by the caress of the glowing fingers of the morning sunlight, that a new day is at hand.

POLLY'S ADVENTURE.

(In this account of Polly's mishaps, the sharp eyes of our readers may find concealed, the names of twenty common birds.)

Many years ago, in a little brown house on a hillside, lived a little maiden named Polly Robinson. Besides Polly, there were her big brother Martin, four-year-old Bob, and baby Phebe, who was yet a tod-

dler and creeper about the floor. Polly, I must confess, was what her big brother called a "fraid cat," and this caused her many unhappy hours.

One morning Mrs. Robinson went to see a sick neighbor, half a mile distant, leaving Polly in charge of her little brother and sister.

Father and brother Martin had started at daybreak for Mr. Shrike's woods to spend the day chopping down trees to make rails for a new fence.

"Be mother's brave little daughter, there's nothing to harm you," said her mother as she kissed her goodbye. Slipping the bolt Polly turned back into the kitchen determined to prove worthy of her great grandfather, whose picture hung in the front room, draped with blue bunting in honor of his daring deeds in the wars of long ago.

For a while she was so busy, that all fears were forgotten. She brushed up the floor, rocked the baby to sleep in the little wooden cradle, then hung the iron kettle on the crane in the old fashioned fire place, and trotting back and forth with the tin dipper, soon had it filled with water, ready to make the mush which was to form the mid-day meal.

Deftly she arranged a pile of shavings and wood on the hearth, and soon a blazing fire was roaring up the chimney. Swiftly she sped to the woodshed and filled a basket from the sweet smelling cedar chips which were protected by a piece of old duck, and soon had Bobby happily engaged in building wonderful block houses, while she herself drew a little wooden rocker before the fire and built as wonderful air castles, by its flickering dancing flames. But soon there came to her mind, the stories she had heard Sam Plover telling the day before, of the immense flat-headed adder he had killed last summer, but a few feet away from the front gate. It was too bad that Polly should have thought of this now, for a snake was what she feared the most. Even a harmless striped snake slipping across her pathway would make flashes of red start into her cheeks, and bring such a lump into her throat that she could hardly swallow. Sam had said that when one snake was killed, its mate was sure to be found not far away, and she thought that although cooler fall days had come, that other adder might still be about.

Hark! What was that noise? Oh, that was but the crowing of a cock. Hark! again. Could it possibly be that other snake? There it was again. "S-s-s-s." Louder yet. What should she do. She must be mother's brave girl. It took all her courage to go to the cellar door and lift the latch. She opened it the tiniest crack. "Hiss-s-s." Yes it surely was the hiss of a snake. Bob, white with fear, clung to her dress. She did not linger to listen, "Slam," the door was tightly closed and father's arm chair was pushed against it, as if fearful that Sir Snake might find

some way to open it. She could still hear it hissing as if very angry. Polly lifted Phebe from the cradle and placed her on the high bed in the next room, with Bob to stand guard, then returned to the kitchen, and armed with the poker, stood ready to face any danger.

You may think Polly a very foolish little girl, but this danger seemed real to her, and to be brave, even though afraid, is the test of courage. Now came a welcome voice—"let me in Polly." She fell sobbing into her mother's arms, and even as she told her story, a loud noise, as of a falling body, came from the cellarway. Her mother opened the door and found—what do you think? An adder coiled for a spring? No, a jug of yeast, which had fermented, ("worked" she called it,) and after a great amount of hissing and sputtering, had forced the cork and most of the contents from the jug. Of course when Martin was told the tale, he made a great deal of fun of his sister, and it was a long time before he ceased to tease her about snakes. But her father said she had shown herself a brave girl, and when Christmas came, she found in the top of her stocking, a bright half eagle marked, "For a Little Heroine, from Uncle Jack Larkin." Polly is a young lady now, but I doubt if she ever forgets her experience with flat-headed adders.

GLEANINGS.

TO THE CHICKADEE:—

As if it said, "Good day, good sir;
Fine afternoon, old passenger.
Happy to meet you in these places,
Where January brings few faces."

—EMERSON.

The kingdom of ornithology is divided into two departments—real birds and English sparrows. English sparrows are not real birds, they are little beasts.

VAN DYKE.

The missing words in last month's account of the snow bird have been found, and you shall have the list to compare with those with which you filled the blank spaces. Hawk, six inches, bluish slate, head, breast, belly, white, bill, September, April.

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Photo from life by
Dr. J. B. Pardoe

YOUNG SONG SPARROWS.
A FULL HOUSE.

SONG SPARROW.

A. O. U. No. 581.

(Melospiza melodia.)

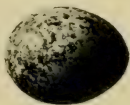
RANGE.

Eastern North America. West to the plains and breeding from Virginia and the southern portion of the lake states, northward to the fur countries. The Song Sparrow is represented in nearly every section of the country by a very similar sub-specie, the chief difference from the eastern variety being that the plumage is darker or lighter according to the nature of the country that they frequent.

DESCRIPTION.

Length, about 6 in.; extent, 9 in.; tail, nearly 3 in. Bill and eye, dark brown. Feet, paler.

General color above, brownish. The crown is brown streaked with black and containing a stripe of dull ash color through the middle. The cheek and a line above the eye are also of this same ashy color. The feathers comprising the coverts and those on the back, have a black stripe in the center and are edged with dull reddish brown and light ash. The primaries and tail feathers are plain brown, the former with a dull reddish edging. A brown stripe extends from the eye to the ear and another from the base of the lower mandible down the side of the throat. The under parts are white, changing to a dull brownish color on the flanks. There are numerous brown streaks along the breast and sides, those on the breast generally uniting so as to form one large brown patch in the middle.



NEST AND EGGS.

The Song Sparrow, by nature, is a ground bird and nests on the ground. Owing to numerous mishaps that they have been subjected to from small mammals and snakes, many of them now place their nests in small bushes. They may be found either in marshy localities or on high dry land. When located on the ground, the nest is generally fairly well concealed by the clump of grass in which it is placed. The nest is formed of dried grasses and lined with finer ones. Their completed set numbers from three to five eggs. The ground color of these varies

from a greenish to a grayish white. The markings on these vary in almost endless pattern. On some the ground color is entirely obscured by the numerous spots and blotches of reddish brown and chestnut. On others the dots are minute and mostly scattered around the larger end. There are few eggs that show the diversity of markings that may be found among these. These Sparrows generally rear two broods of young each year and under favorable circumstances often three.

HABITS.

Only Sparrows; plain little brown ground Sparrows. How many would pass them unnoticed and look only for some more gaudily attired bird. Yet those brown coats cover some of the sweetest and most attractive birds found in this country. In New England the Song Sparrows come with the first signs of approaching spring, and the snow and ice seem literally to melt away under the warmth and fervedness of their songs. From the time of their arrival till their departure late in the fall, they are one continual outburst of melody.



NEST AND EGGS OF SONG SPARROW.



SONG SPARROW

They sing as the sun first shows its face and they sing a farewell when the reddening sky warns us that night is near. The wind that whistles mournfully through the leafless trees, and the biting cold that penetrates the heaviest garments, seem not to detract one whit from their joy.

As the first showers of April burst the swelling buds, their cheery voices welcome the coming leaves and bid them hasten. During the sultry days of summer, when even the farmer is forced to leave his toil because of the extreme heat, their carols are the sweetest, for then they are singing to nests full of little birds and patient mates. In the fall, their summer's work completed, they while away the days in an ecstasy song as they prepare to leave for the south at the first severe snow storm. Is it any wonder that they have endeared themselves to all who know them?

If you reside in the country or on the outskirts of the city and have a few vines or shrubs about the yard, you can easily attract a pair of the songsters to your home. If fed a few crumbs occasionally and treated kindly, they will remain, raise their young and return to the same place year after year. Even leaving out of account their numerous vocal entertainments, they would pay their rental hundreds of times over by the numerous insects they would destroy, either directly or in the form of eggs or larvae.

Song Sparrows are mainly ground birds, and are extensively known, locally, as Ground Sparrows. Except when migrating at night, they are not commonly seen at a greater height than the summit of some small tree, upon which one may sit for many minutes at a time and exhibit his musical abilities in competition with those of his rival, who, perhaps, is perched not a great ways off on a fence-post or rock.

They like the open country and are never found in the woods. For nesting sites, little preference is shown between low swampy land and the high dry pasture land, provided that the latter are well supplied with low shrubbery, bushes or clumps of grass.

The tall rank tufts of grass bordering the streams that cross the meadow, furnish excellent breeding grounds, and in following the course of such a stream, one knows not at which step one of these little brown birds will scurry away. They sit very closely and so sudden is their rush when they do fly, that unless you were on the alert, it is sometimes very difficult to find the treasure.

They watch over their nests very closely and anxiously, a habit that very often causes a nest to be discovered, that would otherwise never be sought for. Unless the female is sitting on the nest, both birds will commence chirping with great vigor when anyone approaches, and the nearness to the nest may be judged by the intensity of their protests,

and when it is found their alternate angry and appealing entreaties would touch the heart of anyone who cared aught for the welfare of the birds.

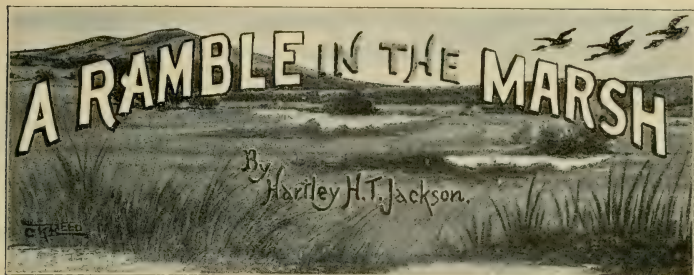
Their anxiety is not limited by any means to the safety of their own young, but their sympathy is extended to all other afflicted or distressed friends. They will protest with just as much vim against the invasion of any of their neighbors' homes as against their own. From all points of view, our Song Sparrows are very desirable birds and should be encouraged to come in greater numbers. Not a single disagreeable trait can be charged against them and their many and varied songs have, and will continue to bring delight to the hearts of those who roam the fields for pleasure or study. 'Tis only those who, themselves, are the slaves of fashion, who will call any member of this specie "only a Sparrow" because of his lack of bright colors. You may clothe a bird in all the colors of the rainbow and you cannot obtain the neat, attractive and well groomed bird that our Sparrow is.

NEST BUILDING UNDER DIFFICULTIES.

Last summer I was much interested in watching a pair of kingbirds, who were building their nest in a large burr-oak tree. They had the nest about half finished when a pair of English sparrows appeared, and after much noisy discussion, decided that was the exact spot for them to set up housekeeping in. So away they went, and with the industry which is the sparrows one good quality, were soon busy carrying the larger part of a straw pile and putting it on top of the kingbird's nest. When Mr. and Mrs. Kingbird returned, you may be sure there was a lively time. They chased the sparrows around and around until they retired apparently conquered, but no sooner were the kingbirds away for a minute than the sparrows were back busier than ever. After a time Mr. Kingbird stayed at home to guard the house while she went on with the building. Soon the sparrows returned again and he started in pursuit of one, but no sooner was he out of sight than the other sparrow was at the nest with its beak full of straws. This was kept up for two days when the kingbirds retired in disgust leaving the sparrows in possession.

Think of it. The kingbird, a very tyrant among birds, who will scream with delight at the sight of a hawk or crow to torment, defeated by a pair of English sparrows.

LESLIE L. HASKIN.



In the northern part of Rock County, Wis., one mile east of the village of Milton, is a small but interesting lake. It is usually spoken of as a "mud hole," but to one who has spent many happy hours tramping about its grassy banks, gliding over its stagnant waters, or wading through its turbid marshes, the applied name becomes a bane. It is not picturesque to the casual observer. It is not noted for its magnificent hotels, its steamboats and picnic parties. But to the man of nature it is a perfect paradise.

Let us leave the daily routine of our office, den or studio and take an afternoon tramp 'round its marshy shores. The day, which of the many shall it be? Let us select the tenth of August. Yonder, in the west, a great bank of clouds meets "Old Sol," now on his course downward, with a golden blush.

A gentle zephyr waves the yellow grain, waiting for the binder. We wend our way onward. The land birds are all quiet, for it is not the time of year when they are apt to sing at mid-day. But we will be amply repaid before evening.

Down the dusty lane we tramp, through the woods, across the corn-field, and we are greeted by a sudden "peet-weet" as a wary Spotted Sandpiper leaves his feeding ground for places on the mud banks, where human feet can ne'er approach. Let us wallow in the marsh grass. Here is a Sora, there a Least Bittern, yonder a Swamp Sparrow. Soaring in the zenith, a Cooper's Hawk, his eager eye on some young Rail, plans his afternoon lunch.

Blackbirds innumerable (mostly the young of the year) restlessly fly from one patch of flags to another, apparently for no other purpose than to while away the time, yet ever ready to grasp such grain as may appear in their course, or to relish some unfortunate worm. Across the lake we hear the "plunk-a-la-plunk" of an American Bittern. Yes, the bird itself has been honored with more names than Lafayette, and has been accredited with as many vocal discords as the English language is capable of expressing.

Among the names applied to this bird, which come to my memory

are Bittern, Barrelnaker, Shypoke, Plum Pudding, Bog Trotter, Bog Bull, Heron, Stake-driver, Thunder Pump and others. The vocal noises I will not mention, for who can imitate the sounds or songs of any bird?

We cease to listen to the cries of *Botaurus* and continue to rove, when, lo! we have a chilly sensation in our feet, and find ourselves buried to the hips in the mire. Master Muskrat is responsible for this mishap. After extracting ourselves, we continue, and come to a place where there is a break in the rushes. A "Coo-coo-coo-coo," and a streak of disturbed water tell of a badly frightened Coot.

A Killdeer flying over the lake, utters his loud "kill-dee, kill-dee" and cautions all his feathered friends that danger is near.

Out on the water, a mother Wood Duck sports with her flock of downy children. Now she ducks her head for a tender tadpole to feed her sprightly young; now filled with pride over her flock she rises up and flaps her wings. How obedient her ducklings are! How they scamper to her call! I think human children could take profitable lessons from any of our birds.



GREEN HERON.

Photo from life.

We watch them with delight, when from a grapevine, nearby, comes the "chow-chow-chow" of a Yellow-billed Cuckoo, warning us that we must hurry on or be left in the dark. We heed the warning and leave the marsh for dry ground.

Song Sparrows fly from under our feet and a Meadow Mole scuds away to hide in denser grass.

We come to a pile of logs on the bank. What recollections are some-

times associated with things! And it is none the less true of this log-pile. What a happy evening I had spent with a friend there, but a few weeks before (May 26th), trying to bring two young Screech Owl to a sociable disposition. But the Owls were indisposed, for turning their heads on one side, and snapping their beaks with a saucy, harsh, "ka-kaa" they would remind one of some cranky person, who thought he was supreme, but, who was afraid to venture an opinion on any subject.

But another friend is there to-day. No sooner are we seated on the pile than a Gray Chipmunk comes and perches on the end of a log. We throw an acorn to him. He grasps it in his paws, then drops it and cocks his head on one side with an air of "thank you, sir, but it was no good," then scampers away to hide in the leaves.



YOUNG NIGHT HERON.

Photo from life.

Twilight settles upon us. All is still, save the dismal croak of the frogs, the occasional cackle of the Gallinules, and the weird, sympathetic whinny of the Screech Owl in the woods. Motionless we think. We wonder at the past with its causes and events, the present with its actualities, the future with its probabilities. A hoarse "qua" overhead suddenly awakens us from our dreams, and we realize that a Black-crowned Night Heron passing by has brought us, as it were, back to life.

We recall the fact that we have had no supper, and, taking a farewell glance at our recent pleasure ground, we depart for home, truly able to say to Mother Nature:

An hour with thee! When sun is set,
 O, what can teach me to forget,
 Oh, what can frame my mind to bear
 The toil and turmoil, cark and care,
 New friends, which coming hours unfold,
 And sad remembrance of the old?
 One hour with thee!



ROAD-RUNNER.

ROAD-RUNNER.

A. O. U. No. 385.

(Geococcyx californianus.)

RANGE.

Southwestern United States, including the southern portion of California, southern Utah and Colorado, southwestern Kansas and western Texas. They are quite abundant throughout the greater part of their range.

DESCRIPTION.

Length, about 24 in.; tail, 11 in.; extent about 20 in.; eye, dark brown; bill and feet, dark horn color, the latter rather lighter and sometimes more yellowish than the former.

Adults. The entire plumage has a somewhat coarse and scrawny appearance, and the feathers on the head and neck have a wiry texture. The crown has a crest of black. General color above is a dark lustrous greenish black changing to a dark steel blue on the head and neck. The edges of the feathers on the wings and tail have the appearance of being badly worn, leaving a whitish fringe-like edge. Breast, throat and sides mixed with tawny-white and black. Under parts a dull white.

The outer tail feathers are broadly tipped with white, as are the primaries and secondaries.



NEST AND EGGS.

The Road-runner places his rude domicile in low trees, in the branches of a cactus or other thorny tree. The nest is clumsy and nearly flat. The eggs are deposited at intervals of several days and may be found in all stages of incubation, from fresh eggs to newly hatched chicks. A complete set of their eggs varies in number from five to eight or sometimes more and they are laid from the first part of April till the latter part of May. They are white or buffy white and nearly smooth.

HABITS.

This bird, called by the Mexicans "Paisano," "Snake-killer" and "Chaparral Cock" is certainly one of the most comical of birds, both in looks and actions, with its extraordinarily long tail and legs.

Its inquisitiveness, habit of flirting its long tail and wings, and ap-

parent ability to move each individual feather on its whole body, in any direction it wishes, are enough to make one laugh, and the way it can get over the ground, when so inclined, is certainly astonishing. It is a combination of flying machine, aero-plane and kangaroo.

They seldom fly, but when alarmed, spread their wings, start their feet in motion, and a gray streak through the underbrush and across country, shows their course. They will run ahead of a galloping horse and the best efforts of the rider cannot bring him abreast of the fleeing bird, until the latter, tired of the race, turns off into the underbrush.

Their food consists of lizards, insects, snakes, etc. They are said to be deadly enemies of the rattle-snakes, capturing them in a peculiar manner. When they find one asleep, they quietly gather up a quantity of cactus leaves and with them, build a fence around the snake. When they consider that they have a sufficient barrier, they give the snake a sharp peck and jump back to await developments. When the snake becomes entangled among the cactus leaves, these long tailed jokers are unable to contain their joy and execute a war dance about their trap, going through all the grotesque antics that they are capable of, and calling his snakeship all the pet names in their vocabulary. When the rattler finds that he is unable to extricate himself, it is said that he deliberately turns his fangs upon himself and dies of his own venom.

Having witnessed the last struggles of its victim, this queer bird dances a few more fancy steps on the body of its enemy, croaks awhile over its victory, and then goes off to search for more fun. I have never witnessed this performance, but have been told by those who have actually seen it, that it really does occur as described. I did see one, that did not get a little green lizard for dinner.

I had been out since daybreak, feasting my soul as only a bird lover can. I had travelled many miles and the sun was high, and it certainly was hot. I had picked out a soft, grassy seat on the shady side of a mesquit bush and had just seated myself to eat my lunch, when I got right up. With an outlay of some time, patience, and rather ill-feeling, I succeeded in separating myself from a large balloon cactus. Not wanting to run any risks, and feeling a little sore over the matter, I sought a bare spot on the bank of a small stream, where I could see what I was going to sit on. As soon as I got settled, I saw a little green lizard coming up the bank, and looking under every leaf and twig with his bright little eyes, for grubs, etc. All at once he stopped and looked up—in an instant he was off like a flash and a Road-runner came jumping down the bank, squawking with anger and disgust at losing a tidbit.

After a hearty laugh I too left for home well satisfied with my days outing, that is not taking the balloon cactus into consideration.

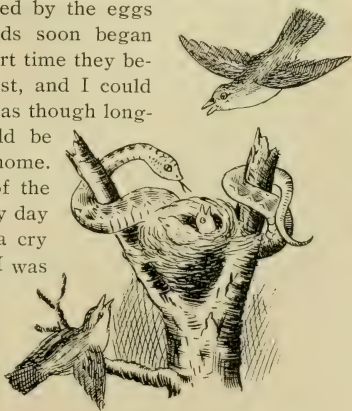


THE LEAST FLYCATCHER.

Among the most lively and interesting of our summer visitors, is the Least Flycatcher. It is with the deepest sense of enjoyment that I listen to and watch this little tyrant when he makes his first appearance in the spring. As you go out in the orchard some morning in May, watching for new comers, you will see him perched on a dead twig in the top of some old apple tree, and he will be uttering his sharp spoken notes with an emphatic snap of his head and tail at each note, stopping now and then to catch an unfortunate fly that should come within a few feet of him, or to drive away some sparrow that should dare to stop in his presence.

Ah! Very little has he changed since last year. He is the same to-day, to-morrow and forever. I well remember a pair that took possession of a large willow tree quite near our house, a few years ago, and after guarding it properly a week or two, they decided to build there. Slowly the nest progressed, but day by day it grew larger. In a week or so it was finished, and finished it was, inside, and out. It was the most perfectly made nest that I have ever seen. Each hair was placed just so and each piece of bark, fibre and lichen on the outside was woven together tightly making it nearly as firm as the foundation of a house. It was placed in the fork of a branch overhanging the road and about twenty feet above it. So well was it concealed that only sharp eyes could detect it from the branches.

In a few days more I made an examination and found four creamy white eggs in the nest. They were very beautiful and I decided at the time that I had never seen a more handsome set of unmarked eggs and I still think so. As the days passed by the eggs were hatched, and the young birds soon began to show their feathers. In a short time they began to be crowded in the small nest, and I could see them peeping over the edge as though longing for the time when they would be able to leave their crowded home. They, as myself, little dreamed of the fate that awaited them. One rainy day while passing the willow, I heard a cry of distress, and upon looking up, I was much astonished to see a large adder coiled around the branches, with his gluttonous eyes peering into the little flycatcher's nest. He had been there sometime, as I



found afterwards, and all this time the old birds had been fluttering about him, doing their best to drive him away, but it was of no use as long as his appetite held good. I did not wait long to see him proceed, but ran as quickly as possible to the house and got a long spear.

After arguing several minutes with the spotted demon, I brought him to the ground, and having seen his finish, I hastened to the nest. What a horrible sight. Three of the little birds were gone, and the remaining one was so badly bitten that he died in a few minutes. It was truly a sad day for the parent birds, and they seemed to show their sorrow.

They stayed around the willow for a few days as if mourning their loss. Not once during these gloomy days did I hear their cheerful, "che-bec." But as the sunshiny days came their spirits seemed to revive, and they decided to try and rear another family. They were wise enough this time, however, not to make their home in the same place. So they moved their nest, piece by piece, across the road to the top of a large butternut tree, and were doubtless as happy when migration time came as though they had not met with their sad misfortune.

WM. H. SANDERS.



Photo from life by Geo. C. Embody.

YOUNG KINGBIRDS.

Identification Color Chart No. 2.

GAUDY RED BIRDS.

- A. O. U. No. 595, Rose-breasted Grosbeak. (*Habia ludoviciana*).

Eastern U. S. and southern Canada. Common. Nest of twigs in trees, bordering woods or streams. Song a very brilliant and melodious whistle, always preluded with a sharp chip. White wing and tail bars very conspicuous during flight. Female, a brownish bird with white markings and yellowish or rosy tint under the wings. Young like the female. Length 8 in.

- A. O. U. No. 593, Cardinal. (*Cardinalis cardinalis*).

U. S. east of the Plains and south of New England and New York. Common. Nest of sticks in thickets and bushes. Crested. Black mask around the bill. Length 8.5 inches. Female, yellowish brown, reddening on the wings, tail, and crest. Subspecies. 593a. Arizona Cardinal (*C. c. superbas*) Southern Arizona and Mexico. 593b; St. Lucas Cardinal (*C. c. igneus*) Lower Calif. 593c; Gray-tailed Cardinal. Southwestern Texas. 594; Texas Cardinal (*Pyrrhuloxia sinuata*) Bill stouter and more hooked than the Cardinal. Southwestern U. S. 594a; Arizona Pyrrhuloxia (*P. s. beckhami*) Southern Ariz. and western Texas. 594b; St. Lucas Pyrrhuloxia (*P. s. peninsulæ*) Lower Calif.

- A. O. U. No. 471, Vermillion Flycatcher (*Pyrocephalus rubineus mexicanus*)

Southwestern U. S. Female has a brownish back and whitish underparts, streaked with dusky and tinged with red. Quite common. Length 6 inches.

- A. O. U. No. 610, Summer manager, (*Piranga rubra*).

Eastern U. S. south of Mass. and New York west to the Plains. Color varies from rose red to vermillion. The wings and tail inclined to be brownish. Female, brownish yellow above and brighter below. Length 7 in. Subspecies. 609 Hepatic Tanager (*P. hepatica*) Upper parts brownish ashy tinged with red. Below, bright red. Female yellowish. No. 610a, Cooper's Tanager (*Piranga rubra cooperi*) A western form of the Summer Tanager. New Mexico and Arizona.

- A. O. U. No. 608, Scarlet Tanager (*Piranga erythromelas*).

Eastern U. S. and southern Canada. Entirely vermillion except the black wings and tail. Female olive above and yellow below. Length 7 inches.



Woodpeckers very prominently marked with red.

Characteristics: Climb trees clinging to them with feet assisted by their sharp pointed tail feathers. Two toes in front and two behind.

- A. O. U. No. 403, Red-breasted Sapsucker (*Sphyrapicus ruber*).

Pacific coast, from British Columbia to Lower Calif. Whole head, neck and breast red. Primaries barred with white, middle tail feathers barred with white.

- A. O. U. No. 406, Red-headed Woodpecker (*Meelanerpes erythrocephalus*).

Central portion of the U. S. West to the Rocky Mts. and east to New England. Very common. Head and neck intense red. Large white wing patches. Back, blue black. Length 9 inches.

- A. O. U. No. 407, California Woodpecker, (*M. formicivorus bairdi*).

Pacific coast from Oregon to Lower Calif. Common. Black on breast extends on belly and flanks in streaks. Back, glossy black. Length 9 inches. Subspecies. 407a, Narrow fronted Woodpecker (*M. f. angustifrons*) Lower Calif. White band on forehead narrower than the former.

- A. O. U. No. 408, Lewis' Woodpecker (*M. torquatus*).

Pacific coast, west of the Rockies and south of British Columbia, upper part iridescent greenish black. Face dark red. Gray collar and breast. Belly and sides streaked with rose red and white. Length 10.5 inches.

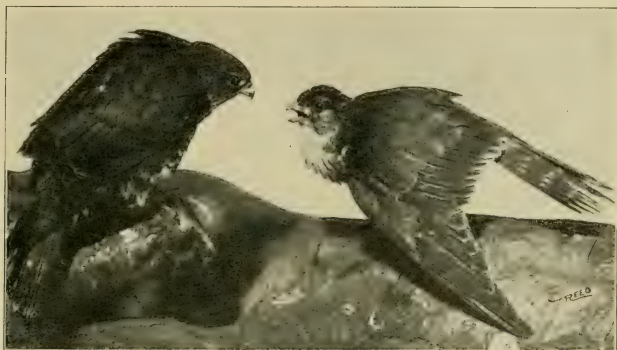
- A. O. U. No. 409, Red-bellied Woodpecker (*M. carolinus*).

U. S. east of the Mississippi and from southern New England southwards. Common. Length 9.5 inches.



AN INTERESTING CAPTIVE.

Free as the wind, that gently sways the tree tops; wild as the torrent that dashes madly down the mountain side; proud as the monarch at whose commands, thousand of subjects tremble; and brave as the general, who leads his army to victory, a diminutive hawk gracefully, yet swiftly wends his solitary way across the meadow. Not a movement in the grass below escapes his keen sight, and not a rustle of a frightened bird in the bordering shrubbery, but what his sensitive ear catches. A field mouse that has inadvertantly exposed itself in scurrying from one retreat to another attracts his attention. A sudden swoop, a spasmodic squeak, and our hero, perched on a low stump, is greedily engaged in an anatomical examination of the smallest of rodents. Such escapades, the catching of numerous beetles and an occasional exciting chase after some small bird, formed the every day events in "Pidgy's" life before I knew him.



THE CHALLENGE.

From life.

One day in early fall, his adventurous spirit carried him too far, and a watchful farmer shot him as he sailed over the hen house. His misfortune befell him purely upon circumstantial evidence, as probably he had no designs on the inmates, but he was a hawk and had to pay the penalty. Fortunately he was disabled in but one wing and was retained as a prisoner of war, instead of being promptly dispatched as is the usual custom in such cases. More likely though he was kept for mercenary reasons, as the following day he came into my possession.

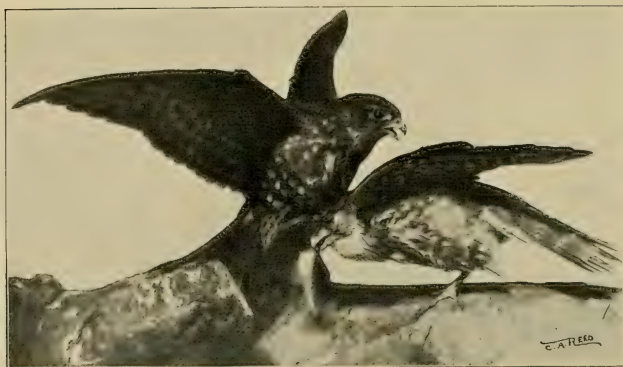


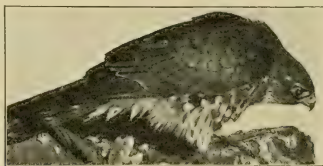
Fig. 2.

From life.

THE COMBAT.

Perhaps those who guessed wrong as to the live bird in Fig. 1, may like to try again and make up their minds before reading farther, which of the above is alive. It is possible, too, that a few who were right before may make a mistake this time.

Pidgy, and by the way, this name became associated with him instead of his whole name of Pigeon Hawk, was a beautiful bird, a trifle larger than the Sparrow Hawk. He had the brightest of bright brown eyes, and his yellow legs, though slender, contained sinews of steel. Woe to the creature that fell into the grasp of those sharp, black, needle-like claws. His back was just changing from the brownish color that denotes youth in these birds, to the blue gray of maturity.



From life.

What's that noise?

A small cord attached to his leg with a piece of chamois, served to keep him within reasonable distance of an old stump that we keep on hand for transient visitors. At first he was bashful about accepting the piece of meat that I tendered him, but a few hours later he concluded that he would satisfy his hunger even in the presence of spectators. The way having now been paved, our friendship grew apace. How his eyes would glisten when he saw me cutting up his meat, and how eag-

erly he would cause it to disappear. He was very impatient and at last concluded that I was too slow in preparing his meals and thought that some help on his part would expediate matters. He would hop to my knee, then to my fingers and assist me by pulling at the piece that I held. He was very fastidious even when hungry, a condition that he always appeared to be in, and would not under any circumstances eat a piece of meat with any fat on it. Time after time I tried to fool him by concealing the fat part in my fingers, but to no avail, for as soon as he had it in his beak, a sudden flip of his head, and the obnoxious piece would be thrown across the room.

I soon concluded that it would be much better for Pidgy to prepare his own meals and it surely was more interesting to me. Immediately upon receiving a generous portion of steak, he would seize it in his bill, hop to his favorite end of the stump, grasp it in his claws, and "go for it." Pull, why at times it seemed as though he would lift himself bodily, together with the stump, and at times, when a particular stubborn piece gave way, you would almost imagine that the whole building trembled, such was the violence of the reaction.

Pidgy was also a good guardian of his property, and having become the possessor of a choice morsel, nothing could persuade him to relinquish it, and he gave evidence that he would fight until death before giving up his booty. An unusually savage looking mounted Red-tailed Hawk, a bird about four times the size of Pidgy, was the cause of much anxiety on the part of our pet. At the mere sight of this fancied rival, he would raise his feathers till they stood on end, in the endeavor to make his small body appear as large as possible.

As the larger bird was brought nearer, Pidgy would squat down and completely cover the piece of meat that was tightly clenched in one foot, while his sharp snapping eyes were on the alert for every possible move of his enemy. If perchance the larger hawk were brought too near, quick as a flash of lightning, out would dart one of our brave pet's feet,



Meditation. From Life.

armed with its sharp little talons, and it required skillful action on the part of the manipulator of the dummy to avoid a catastrophe.

Pidgy's wounded wing healed rapidly and every day he raised and lowered it for exercise and that it might set properly. In about a month it was as good as ever. We now found that he possessed much ability at weaving, or rather unweaving, for at least once a day he succeeded in untying the knot that held him. These escapes were always heralded by a peculiar rapidly uttered whistle as though he were laughing at his success. After a diligent search we would generally find him perched motionless in some exposed position. At first the sight of a tempting morsel was sufficient to cause him to hasten to get it, but as soon as he found that it was but a lure he tried to keep out of reach, and it became necessary to resort to a butterfly net to bring him back to earth. This undignified termination of his escapades humiliated and likewise angered him and he always tried to bite the fingers of his captor.



A Portrait. From life.

Before allowing him to leave us, we secured a number of photographs of him in various attitudes. Two of these, those showing the two birds, have created considerable interest among others and amusement to us. I am pleased to see that our subscribers are unusually observant. Of the replies as to which of these birds is alive, that have arrived up to the time of going to press, eighty-eight have guessed wrong and one hundred and twenty-four have chosen the correct bird. The Hawk on the left is Pidgy. We were very fortunate in securing the photo shown in Fig. 2.

It was taken in a dimly lighted room for fast work and the lighting was assisted by means of several mirrors. Fortunately, just at the instant of exposure, Pidgy's wings were at the upper end of their stroke, and so are fairly sharp on the negative. To obtain this picture, the mounted bird was placed on the stump, with a piece of meat under it. Pidgy was brought in and placed on the other end of the stump. His anger was aroused immediately at sight of the other Hawk apparently feasting, while he had nothing. He uttered his challenging cry, made one jump, seized the meat in one foot and with the other was preparing to demolish the enemy, when the exposure was made. The other picture containing the two birds represents Pidgy as he looked after being separated from his antagonist, and about to return to the attack.

CHESTER A. REED.



Good Steak—but tough.

From life.



Photo from life by C. A. Reed.

PIGEON HAWK.

PIGEON HAWK.

A. O. U. No. 357.

(Falco Columbarius.)

RANGE.

The whole of North America. Breeds chiefly north of the United States and is found in the latter, except in the northern parts, only during the winter migrations.

DESCRIPTION.

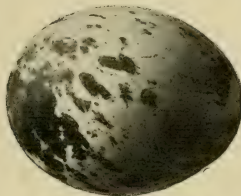
Length, from 11 to 12 in.; extent, 24 to 26 in.; tail, about 5.5 in. The larger of these dimensions applies to the female, which is quite a little larger than the male bird. Eye, brown. Feet, yellow. Cere and base of the bill, yellow, the remainder being blue-black.

Male.—Entire upper parts a bluish gray, each feather on the back and coverts, having a black shaft line. The primaries are black, with lighter tips. The tail is like the back in color and is crossed by three black bands and tipped with one of white. The under parts are whitish, streaked longitudinally with dark brown, these streaks being bold on the breast and sides, while on the throat they are narrow pencil lines. A superciliary stripe of gray shows prominently above the eye.

Female.—Young, and male in autumn plumage. The back and tail are dark brown instead of the blue-gray color, and the tail is crossed by three bands of dull yellowish white and tipped with band of white.

Otherwise they are similar to the spring plumage of the male, except that young birds are apt to have far less numerous markings on the breast and throat. The bird shown in the illustration is an adult male in the fall dress.

NEST AND EGGS.



This Hawk shows little partiality in the choice of a nesting site. It may be placed in the crevices of a cliff, in hollow limbs of trees, or on the branches. The eggs are laid during May and are generally three or four in number. The ground color varies from a creamy to a cinnamon color and they are heavily blotched with various shades of brown.

HABITS.

This is one of the smallest, most handsome and graceful of all the Falcons. One of his most striking personalities is his courage, indeed, if his body were directly in proportion to that quality he would perhaps be the largest of all birds. He will attack and capture birds of more than twice his size and is very persistent in his pursuit of any creature that may have attracted his fancy. One of these small hunters has been known to enter a house in pursuit of a Flicker, which had flown through the open window in the hope of escaping certain destruction, which would otherwise have befallen him.

Contrary to the usual custom of other Hawks, they do not confine their attacks upon other birds to making sudden dashes at them in the hope of catching them unawares. If the object of their attack sees and avoids them at the first swoop, they will at once give chase, and follow every motion of their quarry through its devious course, and rarely will they fall short of success in their endeavor. Their swiftness and agility are phenomenal and no sudden or unexpected move of the pursued can throw this little harrier off the track.

As is nearly always the case, no matter how brave a bird may be in the presence of others of the feathered tribe, he will have a wholesome fear of a human being. In this respect, the Pigeon Hawk does not differ from others, but is very wild and shy, except where the safety of its nest is concerned. The actions of different individuals of this species vary in regard to the reception they accord to molesters of their domestic life. One may immediately, apparently, leave the vicinity, while another may attempt to defend his home and make fearless swoops at the head of the invader.

Although naturally shy, if captured they can easily be tamed, and doubtlessly in the day of falconry they could have been used in the chase, as was the Merlin, a very similar Hawk. Besides small birds, and large ones, too, his food is made up largely of mice, crickets and grasshoppers.

Pigeon Hawks are rarely met with in the United States during the summer, except in northern New England and in the mountainous localities of the northwest. By far the greater number of them nest in the interior of Canada. They are quite plentiful in Alaska and here nest on the cliffs or in the tops of pine trees. Their nests when placed in the latter situation are very large for the bird and resemble Crow's nests. The adult male in summer is an unusually attractive bird and as with all the Hawks, is much smaller than the female or young.



HAWK OWL.

AMERICAN HAWK OWL.

A. O. U. No. 377a.

(Surnia ulula caparoch.)

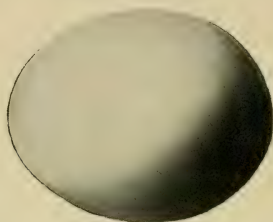
RANGE.

Northern North America, migrating in winter to the northern boundary of the U. S.

DESCRIPTION.

Length, 15 in.; extent, 33 in.; tail, 7 in. Eye, Yellow. Feet, feathered to the toes. Upper parts brownish, nearly black on the head, which is finely spotted with white. Back and wing coverts also spotted with white, and the tail is narrowly barred and tipped with light gray. Under parts white, closely barred with reddish brown. Face and throat white, bounded by a black crescent behind the ears and across the breast.

NEST AND EGGS.



Nests either in the tops of pine trees or in the hollow of a stump. It is lined with fine grasses and feathers. The eggs are laid during April, the time varying with the locality. The white eggs range in number from four to six.

HABITS.

These birds might well be regarded as the connecting link between the hawks and owls. They have features that are common to both, though the owl-like ones predominate. They hunt as freely by daylight as by night. They have the long tail of the hawk, and thus are able to more closely follow their prey through the brush. They often sail as the hawk does in circles, and their note resembles that of the small hawks. On the other hand they have the feet and soft plumage of the owl and can almost float through the air. Their food consists of rats, mice, insects and birds up to the size of a partridge. They frequent small woods and do their hunting chiefly in the mornings around the meadows. They are very bold, daring, and very savage in the defence of their homes. They are frequently caught in traps that are set for other creatures. In winter they create great havoc among the flocks of ptarmigan. But few of them cross the border to the U. S. in the winter.



Address communications for this department to

MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

MY DEAR YOUNG FOLKS:

As I sat by the window one of the bright days in February, there flew down half a score of dear little birds with backs of blue and breasts of brick red, and softly twittering, alighted on a tree close by. They staid about all the morning, and I think they wished me to send you their greetings and tell you that spring is surely coming.

The Bluebirds are dear friends of mine. Our hammock was swung when I was a child, from the corner of the house to a spruce tree; a little higher up on the tree trunk was fastened a box with a round hole in it, where a pair of Bluebirds made their summer homes for many years without seeming to resent the interest shown by several little lads and lassies in the training of the young birds. Indeed, they occasionally swung on the rope while the hammock was occupied by two or sometimes three children, and seemed to know that naught but good will was felt toward them. Then, too, there was Sir Robin Redbreast, who would come daily to the window sill for his breakfast of crumbs, and if the window was closed, would tap the pane of glass with his bill to inform us that he was quite ready for his regular rations.

One of our young folks, Charles H. Rogers, of New York City, has sent a correct account of the Junco. If Roxana Hevy has access to a good library, she will find more satisfactory answers to her long list of questions, in any good book on birds, than my space would permit me to give. Do not expect that your letters can be answered in the next month's magazine, for oftentimes it is already in press when your letters reach me.

Your friend,

MEG MERRYTHOUGHT.



SAW-WHET OWL.

A TRUE INCIDENT.

Such an adventure came to me,
Methought, to our young friends I'll write
No Sinbad sailing o'er the sea
Has ever seen so strange a sight.

Upon a bright and balmy day,
When Bluebirds whispered "Spring is here,"
And smiling nature seemed to say
"Sweet flowers and birds will soon appear."

A sheltered sunny bank I found
And resting there wrapped deep in thought
I soon was roused by whirring sound—
There in my hair a bird was caught.

The bird was dressed in plumage gray
Flecked 'cross the back with spots of brown,
I raised my hands, and then straightway
Folded the stranger in my gown.

To finger tips thrilled with surprise,
 I quickly hastened back to town;
 And to some wise friends bore my prize—
 A captive worthy of renown.

With bated breath, all nearer drew,
 There cuddled in a soft brown ball—
 Exposed to our astonished view,
 Lay—a black cat—and that was all.

I started back with looks aghast,
 All stared—but no one said a word,
 Till some one cried—"I know at last,
 The mystery's solved, it's a cat bird."

The kitten mewed,—Then I awoke,
 (Things are not always what they seem)
 Oh, no, my dears! This was no joke.
 It all was true. But 'twas a dream.

GLEANINGS.

"Beloved of children, bards and spring,
 O, birds, your perfect virtues bring—
 Your song, your forms, your rhythmic flight,
 Your manners for the heart's delight;
 Nestle in hedge, in barn, or roof,
 Here weave your chamber weather proof.
 Forgive our harms, and condescend
 To man, as to a lubber friend.
 And generous, teach his awkward race
 Courage, and probity, and grace."

—EMERSON.



MISS LIBERTY AS BIRD KILLER.

"The electric light in the torch of the Goddess of Liberty Statute on Bedloe's Island in the harbor of New York kills many thousands of birds annually, much in the same way that a lamp does the moths.

"There have come mornings after a stiff wind had been blowing, when several hundred of the poor little winged victims were picked up dead. There have been as many as twenty-seven varieties found at one time; thus showing that all kinds are at times attracted by glare."

The birds which were concealed in the account of "Polly's Adventure" last month are as follows: Robin, Martin, Phoebe, Creeper, Shrike, Rail, Blue Bunting, Crane, Dipper, Chimney Swift, Cedar (bird), Duck, Flicker, Plover, Redstart, Swallow, Crow, Bob-white, Eagle, Lark.

We would like to have our young folks have a finger in the "pi" this month. This printer's "pi" may not appeal to you as mother's pie does, but we rely on you to help us to dispose of it. Can you straighten out the type in this account of a bird in

A LITTLE "PI?"

I am a *kilcerf*. Many of you doubtless have nicknames, but I have over *fytor*. Golden-winged *odwo kercep*, Yellow-hammer, High Hole, *ecukry* and clape are some of my common names. You may know me by the black crescent on my *streab*, the *dre* band on the back of my *adhe*, my *twhie* rump and *lolwey* wing linings. I have black *seekch* and *dorun* black spots on my belly; my back is *dolneg-nowrb* with black streakings. Unlike other members of my family, I spend much time on the *dogrun* eating *sectins*, especially *nats*. My home is in a high hole in an old tree, where I feed my young with softened *odof* from my own *porc*. Perhaps you have heard my loud voice in the woods, and the vigorous *sttlooa*, which I beat upon a hollow *milb* to amuse myself and my mate.

THE BROWN CREEPER.

The little Brown Creeper climbs up the tree,
 Not stopping to talk with the Chickadee-dee
 And clinging on with his dear little feet,
 He looks unexpressibly cunning and sweet,
 We listen with joy to his cheerful note
 Coming from such a tiny clear throat.

PEIRCE H. LEAVITT, age 14,
 Cambridge, Mass.

Can You Talk

On Your Feet.

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Fig. 1.

MOTHER BLUEBIRD.

Photo from life

THE INS AND OUTS OF BIRD PHOTOGRAPHY.

It is only within the past few years that hunting birds with the camera has been attempted, and wonderful results are now being obtained. Nearly all that can be learned from the dead bird is now known, and many of those who were formerly devotees of the gun have now discarded it and adopted the camera in order to study the habits of the living bird. Nature photography in as much as it pertains to birds, may be separated into three classes based on the difficulty of securing good results and the value of the pictures obtained. Class I. relates to the



Fig 2.

Photo from life.

LOOKING AT THE FIVE BLUE EGGS.

photographing of nests and eggs. After having found a nest the rest is simple photography. However one must be careful not to frighten the bird and cause it to leave the nest. If proper care is taken to see that the nest is well lighted, and a small stop used to secure good definition, satisfactory results may be obtained in all cases. In class 2 may be placed young birds and captives. As a general thing young birds, especially when they think they are about capable of flying, seem to think it is their duty to cause as much trouble to the photographer as possible.

The professional photographer, in his studio with all facilities at hand,

knows nothing of the difficulties incurred in trying to persuade a nest full of little birds to look pleasant. I might mention one case as an example of some of the trying situations encountered. After occupying about an hour's time and with much exertion, having got the camera up a particularly difficult tree, lashed it firmly in position, and focused sharply on a nest full of small bits of bird life, it is anything but encouraging to have them suddenly decide that their presence is no longer necessary, and see them scatter in all directions. One does not realize the labor spent in preparation until, his object defeated and enthusiasm allayed, he makes the journey back to mother earth. After some such annoying failure I have often had to laugh as I realized the similarity between my situation and that of the cat, who having quickly and gracefully run up a tree, hoping to catch some unwary bird, her ambition defeated, is obliged to clumsily and laboriously shin down backwards. Pictures of captive birds always prove interesting and sometimes amusing, but they present little of real value as to the habits or actions of the wild bird. The recently acquired captive nearly always has a frightened, unnatural expression, while the one that has been confined long enough to accustom himself to the life, has at the same time lost his natural traits. Class 3 includes only photographs of free, adult wild birds. Pictures obtained under these conditions are immeasurably more valuable than any that can be taken of captives, and by the way many of the bird photos that are appearing in popular magazines are from birds in confinement and the articles should so state. There are many ways to obtain camera shots at wild birds and new ones are being constantly devised. The one that offers the most advantages and also



Fig. 3. Photo from life.
A BRAVE CHESTNUT-SIDED WARBLER.

shows the birds at the most interesting period is that of catching them caring for their young. The nest furnishes a center of attraction to which they are certain to return, and if arrangements are properly made the desired results may be had without any injury whatever to any of the parties concerned. Occasional snap shots may be had of birds as they hop from twig to twig. I do not wish any one to infer that it is possible to march about the country and snap shot every bird they see. You must bear in mind that all birds are shy, particularly so, if for any reason one wishes to approach closely, as it is necessary to do to secure a picture of any size suitable to show the bird. Another necessity, if this method is to be followed is a reflex camera, that is one in which a mirror is arranged to show the image up to the instant of exposure.

One of the latest schemes to secure negatives of the elusive bird is a camera trap devised by Mr. Chapman. A perch is arranged so that the weight of the bird that alights upon it will make an electric connection and release the camera shutter. Doubtless many valuable photos will be secured in this way.



Fig. 4.

A WOODCHOPPER

Photo from life.

I might have provided one more class for bird photos. That is the fraudulent class, birds that are said to be alive, but are not. There seems to be much need for such a class now, judging from the number of photographs that are being forced upon some of the popular monthlies and claimed to be from wild living birds when really they are from mounted ones and some very poorly done at that. In nearly all cases the makers of such photographs will allow some small detail to escape their notice, which to a close observer of birds, would expose the fraud.

If only the editors of some of the magazines could be persuaded to submit all Nature photos to some expert in the subject, it would not only prevent their being the ignorant deceivers of their readers but would drive such fraudulent schemers out of business by closing the market for their wares.



Fig. 5. Photo from life.
HAIRY WOODPECKER.

The only qualifications necessary to successfully photograph wild birds are: A love for birds, (not a collective sort of love, but for their welfare;) an abundance of time; and an unlimited abundance of patience. There seems to be a general mistaken impression among those who have not tried, that good pictures can only be obtained with the most expensive apparatus. This is not so and any one armed with a rectilinear lens and a wooden box for a camera, can do just as good work in this line as he who has a finely polished camera, brass trimmed and with all the latest improvements and an anastigmat lens. All of the pictures of live birds I secured the past year were made with the ordinary trade lens supplied by the Manhattan Optical Co., on their 5x7 Wizard camera. With the subjects that I worked upon I could not have improved upon what I obtained if I had used any other lens of like focus, no matter how expensive. This year I have several other lenses to use, but they were selected solely because of their greater speed and not because they will take better pictures.

A number of our subscribers have asked what equipment is necessary for nature photography. To anyone about to purchase an outfit I would suggest that they obtain a lens of between ten and twelve inches focus. This will be best adapted for all classes of work. The camera may be home made or a stock camera but for a lens of this focal length the bellows should not be less than eighteen inches long in order to secure good sized images of the birds. A good substantial tripod should be included and always carry some strong twine with your outfit. This will prove useful for tying back branches that would be out of focus or

obscure the view, and also for tying the tripod legs to the branches when it is necessary to do aerial photography. For work about the nests a long rubber tube is a necessity to set off the camera shutter. About forty feet of this tubing will generally answer. A good mirror, not less than a foot square will often enable you to throw the sun light on nests that it would otherwise be difficult to photograph. Of course you will need a good pair of field glasses, both to find the nests and to watch the birds so as to know at just what instant to make the exposure. In selecting these you should get a pair that has a wide field or angle of view.



Fig. 6.

INDIGO BUNTING.

Photo from life.

A glass that will magnify three diameters is plenty strong enough for all work, and anything more powerful will have a narrower angle of view.

The photographs shown with this were taken at various times during the past summer and furnished subjects for several interesting rambles. The Bluebird shown in Figs. 1 and 2 is the female who is just about to enter the hole in front of her, at the bottom of which are five light blue eggs. This nest is about twelve feet from the ground in a large apple tree. The only possible location for the camera was a single horizontal bough just below the nest. The camera was strapped firmly to

this, with the lens about twenty-four inches from the nest hole. Owing to the location of the branch I was wholly unable to focus the camera from in front, as I was in my own light. I was thankful that there was no one to see or possibly photograph my maneuvers before I finally got to the rear end of the camera where I could see the image on the ground glass. As the camera was so close to the object, I stopped it down to 32 and took the pictures with an exposure of a hundredth part of second. This short exposure under the conditions was only possible because I had the bright sunlight reinforced by the reflection from the mirror.

In a previous number I have mentioned the little Chestnut-sided Warbler shown in Fig. 3. She was very tame and I had the camera set up in front of her home and focused on her before she left the nest.



Fig. 7.

MADAM GROSBEAK.

Photo from life.

I doubt if she would have left the nest then, but the tripod leg slipped and she thought that the whole outfit was coming over on her. As she seemed so little afraid I did not hitch on the long tube, but waited until she had returned to the nest and then carefully walked up to the camera. As I approached, she became very nervous and several times rose to her feet and spread her wings as though going to leave. Her courage was good, however, and she allowed me to reach the bulb and make the exposure, after which I removed the camera and left her in peace still sitting on her four small eggs. As the lens was only about twenty inches from her and to reach the bulb my hand had to come to within about the same distance, you can imagine that she was a brave little bird.

The two views of the Hairy Woodpecker, represent my only successful attempt to snap-shot a bird by walking up to him and guessing at the distance without the aid of a reflex camera. I followed this same bird as he flew from tree to tree until I had made six exposures of him; with the exception of these two all the attempts were flat failures, as were many others that I have tried to get by this means.

The Indigo Bunting and the Rose-breasted Grosbeak are examples of waiting, the former proving an exceptional trying subject, and requiring several visits before I could get the picture shown here.

No. 8, the Kingbird, might well be used as an example of photographing under difficulties. Before I had reached the location of this nest the wind, which had been blowing gently when I had started, had been steadily increasing in force until it had almost reached the proportions of a hurricane. But for the fact that I did not expect to be able to make another trip to this place I should never have attempted to take any pictures on this occasion. Placing a camera in position when you are some distance from terra-firma is at best a rather delicate operation, but with all the branches swaying and creaking, I thought I never would succeed. During the several hours' wait that followed before Mrs. Kingbird deigned to return, I was in suspense all the time for fear that even if the tree did not blow down, at least the camera or the nest might fall to the ground at any instant.

CHESTER A. REED.



Fig. 8.

KINGBIRD WITH GRASSHOPPER.

Photo from life.

BLACK AND WHITE WARBLER.

A. O. U. No. 636.

(Mniotilta varia.)

RANGE.

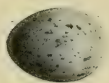
Very abundant in the United States east of the plains. They breed from Virginia and Kansas northwards throughout their range and in winter may be found from the gulf states southwards.

DESCRIPTION.

Length, 5 in.; extent, 8.5 in.; tail, 2.25 in. Bill and feet, black. Eye, dark brown. Male:—Upper parts, black, streaked with white. Median line, Superciliary line, tips of middle and greater wing coverts, edge of secondaries and spots on inner webs of outer tail feathers, white. The under parts are white, heavily striped with black. Female:—The upper parts are similar to those of the male bird, but the under parts are mostly without the black markings.

NEST AND EGGS.

An overhanging stone, fallen tree trunk, decayed stump or a loose piece of bark is generally made use of to furnish a shelter for these nests. They are compactly made by twisting grass, leaves and strips of bark together and lined with hair or fine roots. Four or five creamy-white eggs speckled with chestnut will occupy such a nest about the latter part of May.



HABITS.

A musical dreamy note breaks upon our ears. A succession of hissing whistles in a very high key. A Black and White Warbler is near us, but just how near remains to be seen, for their notes are very deceiving when you try to find them. We will not find his habits to be like those of the other Warblers. Neither are they the same as the Creepers, although he is as frequently called the Black and White Creeper, as a Warbler. He creeps about the limbs and trunks of trees to be sure, but the true creepers always assist themselves with their tail in clinging to the limb, while this Warbler does not. Again, unlike the creepers, who commence at the bottom of a tree and work their way by a series of hitches, upwards, this subject will traverse a tree in any position more after the manner of the Nuthatches. The strongly contrasting markings of the full plumaged male make a combination that is very dazzling to the eyes and gives the impression that his colors are a blue and black, whereas they are not. The height of diligence is shown by these gaud-



BLACK AND WHITE WARBLER.

ily marked creatures as they pick their way over the trunks and branches of the trees. They examine every nook and cranny in the bark, hoping to find some stray insect that had escaped the sharp eyes of the numerous other birds that had searched the same territory. When thus occupied they seem unmindful of any one watching them and only hop out of the way when one thinks he is close enough to catch them in the hand.

I know of no other Warbler, or in fact any of the smaller birds, in which the instinct of home preservation is so well developed. Last summer as I was walking through a small swampy piece of woods, a small black and white bird fluttered in a most helpless manner across my path.

If I had been unacquainted with the ways of this bird I should have thought that the poor bird had been the victim of some boy with an air gun or perhaps had barely escaped some of the cats that delight in roaming in the woods. As is my usual custom in such cases, after noting the exact place at which I had first seen the bird I followed it to see its actions. It appeared to be in very bad shape and even the smallest twig was sufficient to cause it to stumble or fall. One wing was trailing behind and the bird really appeared to be wholly unable to use it. The mouth was open as though she was gasping for breath and it looked as though at any instant she might fall over and expire. Still she managed to have vitality enough to keep herself always a few inches beyond reach of my outstretched arm. After she had led me by a very devious course to a distance of about twenty feet through the underbrush, she chirped in a gay manner and flew to the trunk of a tree, where she started looking for food as innocently as though she had never seen me. If anyone had not noticed just where the bird started from, even if they had thought of a nest as being the cause of the strange actions, they would never have been able to find it again. I went back and in an old stump, the inside of which and one side, had rotted away, I found five eggs laying in a nest made of grapevine. After I had found the nest, the bird, though very angry, still had hopes of being able to deceive me and would again and again throw herself at my feet and try to lead me away. Why she had left the stump in the first place is a mystery, as several times afterwards, when I passed that way, I made a point of going by her home. Although she watched me very closely, even when I placed my hand on the stump she remained in position on the nest, crouched down so closely that the only visible portions were the sharp eyes and the tail that stuck upright against the side of the dead wood.

Nature's provisions for the protection of her feathered children are truly wonderful, and are little realized by those who are content to spend their spare time in loitering about the city streets.



Photo from life by E. E. Johnson.

BLACK AND WHITE WARBLER ON NEST.

A VOICE FROM CHINA

Being somewhat familiar with most of our American birds and their habits, I have been greatly interested in the study of the Chinese birds since I came to Foochow two years ago. This is certainly a land of birds and that too of a great variety. Though I have not personally met so many species, I am told on good authority, that from this one province of Fukkien there have been sent to England the skins of about six hundred varieties, and when one remembers that in almost every case these birds are strangers to an American, you can imagine the pleasure in making their acquaintance and watching their habits. To begin with, the birds of this land are all very highly colored, on an average very much more so than their American friends, and almost to a bird they are songsters. We have only been able to recognize thus far, such friends as the White-necked Raven, the Black-billed Magpie, the Lark Sparrow and the English Sparrow and Barn Swallow. In the case of the friends whom we are able to recognize, there are some

marked differences in appearance and habits from what we would expect. The representative of the English Sparrow in this land is much smaller than his American relative, and the male and female are marked very much alike, each having a black spot under the throat. Their call note and habits are very similar to those we are acquainted with at home. The White-necked Raven is also much smaller than those at home, while they seem to confine their nest building to the trees instead of sometimes building on the cliffs as the American bird does. The Barn Swallow not having a barn to build in has taken up his abode in the house with man and goes about his business there as unconcerned as though he owned the place.

It seems to me that I never saw so many Flycatchers elsewhere, and they are very highly colored and strangest of all, almost to a bird are songsters, in many cases having a very sweet note. Vireos are also plentiful, though their eggs in every case I have thus far noticed are either a bluish white or a clear white—nest is pendent and of about the same construction as the American birds. The most common variety of this little friend is a very rich olive on back with a yellow throat with breast shading to white—bird about size of White-eyed Vireo or smaller. Among all the different flitters, we have failed to see a single warbler of any kind. To us this seems strange, for in most cases every family is represented in some way. In this connection I want to speak of what seems inexplicable to me and that is that, though this is the land of most lovely flowers, there are absolutely no Humming birds so far as I can learn. Why this should be I cannot tell. We miss their merry hum among the flowers. The representative of the Screech Owl is quite different from anything I have seen at home, though about the same size and of about the same habits. His note is more of a laugh though quite as weird, but the egg instead of being white is very much spotted with blood spots in most cases. These spots will wash off upon applying hot water, but when taken from the nest the eggs look very much fly spotted, indeed these spots almost hide the color of the egg. The size is about the same as the Screech Owl's egg.

Kingfishers are numerous and of every size and color, but all are very highly colored, but they are by no means as noisy a lot as their relative, the Belted.

Among the most interesting of the birds is the little Grassquit which is numerous here. This bird begins to build in early April and I have seen them at work building as late as October 10, though we have never found eggs later than the middle of August, hence I believe that the October work was play, or perhaps the birds were building just to keep in practice. Of all birds I have ever seen, this one is the most partic-

ular about its nest, and is the easiest to break up. To put the hand in the nest is certain, and generally if the bird is sure that you have seen her carrying a straw to the nest which is a large round ball, composed of grass, with an opening on the side, she will leave it and destroy any egg that she may have laid.

Our representative of the Chickadee is a very beautiful little fellow, a little larger than the American bird, and very highly colored, with a broad metallic black stripe running from the bill, down the breast to the tail. A peculiar thing which we have noticed about this bird is that, it not only uses natural cavities in trees for its nesting place but very often makes use of holes in the ground, where we have found a genuine Titmouse nest with its young but thus far we have seen no eggs.

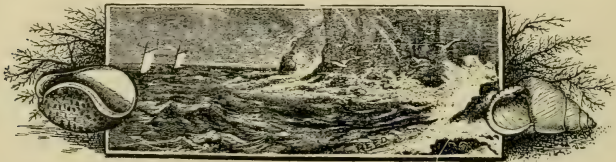
ERNEST B. CALDWELL, Foochow, China.

ODD NESTS IN KANSAS.

I will describe a few of the odd nests that I have seen here in Kansas.

The most out of place one was that of a pair of King birds. On the board fence of a cattle gap at a railroad crossing. Several trains passed each day not more than eight feet from the nest. For an English Sparrow this would not seem strange, but *Sir Tyrannus* is not generally friendly even with a freight train. The hottest of all nesting places that I have found was in the tool box of a mowing machine. A pair of Wrens built their nest in this cast iron house and raised a large family in it. I did not take the temperature of the box, but a thermometer placed in the dry sand in our yard went up to one hundred and forty six degrees, and any piece of iron laid in the sun soon got too hot to hold in one's hand. The tool box was not over four inches deep and had an iron cover. The Wrens came and went through a hole in the end of the box. The most perfect bit of bird skill was the nest of a Baltimore Oriole, made almost entirely of black and white horse hair. A colony of Crow-blackbirds got a bad habit of using binder twine picked out of straw stacks. It made very strong nests, but they did not have the skill of the Oriole, so the nests were rather fuzzy looking affairs.

A. K. BOYLES, Kansas.



Identification Color Chart No. 3.

Chestnut-colored Sparrows.**No. 559, Tree Sparrow, (*Spizella monticola*).**

Eastern North America. Breeds from the Arctic Ocean south through Canada and in winter migrates in large numbers through eastern U. S. to about the middle portion. 6 in. in length. Subspecies;—559a. West Tree Sparrow, (*S. m. ochracea*). Western North America. Breeds in Alaska and the Arctic Regions. South in winter to New Mexico and Arizona. Paler than the eastern form.

No. 560, Chipping Sparrow, (*Spizella socialis*).

North America east of the Rocky Mts. and south of the Great Slave Lake in Canada. Breeds from the Gulf states northwards. Very common. Length, 5.25 in. Subspecies;—560a. West. Chipping Sparrow, (*S. s. arizonae*). Western U. S. from the Rocky Mts. to the Pacific.

No. 563, Field Sparrow, (*Spizella pusilla*).

The U. S. and southern Canada east of the Plains and south to the Gulf States. Very common. Length, 5.5 in. Sub-species;—563a. West. Field Sparrow, (*S. p. arenacea*). Found in the Plains from Texas to Montana and Dakota. Wings and tail longer than the eastern bird and colors grayer. 564. Worthen's Sparrow, (*Spizella wortheni*). New Mexico.

No. 561, Clay-colored Sparrow, (*Spizella pallida*).

Interior of N. A. from the Mississippi valley to the Rocky Mts. Length, 5.5 in. 562. Brewer's Sparrow, (*Spizella breweri*). Western U. S. from British Columbia southwards. Similar to the Clay-colored, but upper parts are more narrowly streaked with black and it lacks the median line.

No. 584, Swamp Sparrow, (*Melospiza georgiana*).

Eastern North America. Breeds from the northern U. S. into southern Canada and in winter migrates to the Gulf States. Very common. Length, about 6 in.

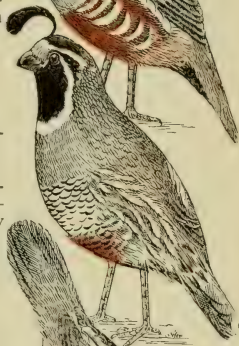


Partridge, (commonly called quail.)No. 292, Mountain Partridge, (*Oreortyx pictus*.)

Pacific Coast Region, from central California northwards to Canada. Very common. Length, 11.5 in. Subspecies;—292a, Plumed Partridge. (*C. P. plumiferus*). Southern portions of California and the mountainous parts to the eastward. 292b, San Pedro Partridge (*O. p. confinis*) Lower California. Differs from the two former in the grayer back and thicker bill.

No. 294, California Partridge, (*Callipepla californica*.)

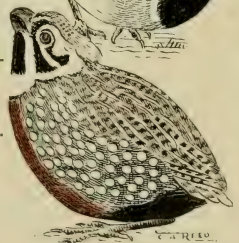
Coast region of California and north to British Columbia. Very common. Length, 10.5 in. Subspecies;—294a, Valley Partridge. (*C. c. Vallicola*). Interior valley of California and the foot hills of the Sierra Nevadas.

No. 295, Gambel's Partridge, (*Callipepla gambelii*.)

Southwestern United States. Very common. Length, 10.5 in.

No. 296, Massena Partridge, (*Cyrtonyx montezumae*.)

Southwestern Texas, New Mexico, and Arizona. Length, 9 in.



HOODED MERGANSER.

A. O. U. No. 131.

(Lophodytes cucullatus.)

RANGE.

This Merganser is distributed throughout North America, although in certain localities it is rather uncommon.

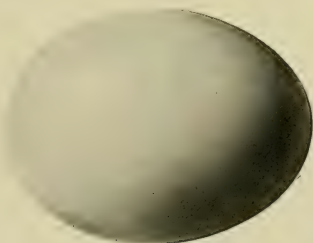
DESCRIPTION.

Length, 17 in.; extent, 25 in.; tail, 4 in. Bill, black. Eyes, yellow. Feet, brown and webbed. Male:—Head with a beautiful, semicircular, thin, disk-like crest, this crest being black and enclosing a large white patch. Head, neck, back, wings and tail, black. Under parts, white. Sides, reddish-brown, crossed by wavy black lines. Secondaries, lengthened and with a white stripe in the center. White patch on the coverts.

Female:—Crest, small and brown. Head, neck, back, wings, tail and sides, brown, lightest on the head and neck. Small white bar on the wing. Under parts, white.

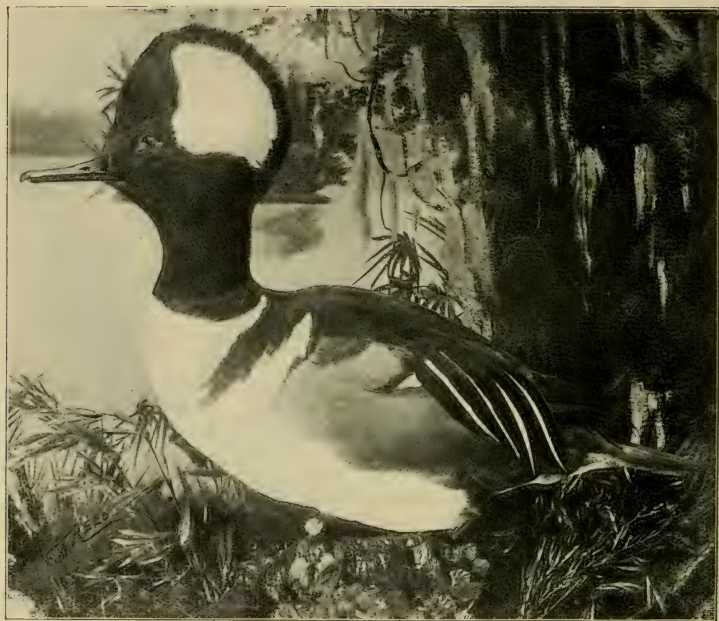
NEST AND EGGS.

They nest in woody localities in the vicinity of water. A hollow in a tree or stump is lined with grasses, leaves and down, and from nine to fifteen eggs of a pearly white color are laid. The eggs are laid during the latter part of May or June and the young when hatched are said to be carried to the water in the bill of the female.



HABITS.

Mr. James K. Thibault, Jr., has sent the following observations on the Hooded Merganser in Arkansas: The beautiful Hooded Merganser breeds in this locality, occasionally, but as a rule goes farther north to nest. It begins its nesting earlier than most of the Ducks and is one of the only two that breed here, the other being the Wood Duck. Like the latter species it nests in trees, but seldom alights upon them. It



HOODED MERGANSER.

does not eat fish to nearly as great an extent as the larger Mergansers, confining his diet more to shell-fish and tadpoles. On this account his qualities as a table Duck are much better than many others and consequently he is much sought after for that purpose.

To my mind this is second in beauty only to the Wood Duck, with which it is frequently confounded because of its tree-nesting habits. This Merganser is an expert diver and secures most of his food in that manner. It seems as if it must have advanced a stage beyond the expert in the matter of diving, for it can dodge shot as well as any Grebe ever could. They are exceedingly hard to approach after they have once seen you. I have walked around a pond five or six times in trying to get on the same side with them, but to no avail, for every time I saw them there was the same amount of water between us.

They are also endowed with a knowledge of fire arms that is astonishing. They appear to be able to tell whether a hunter carries a rifle or a shotgun and also just what distance either of them will kill. When happened upon unexpectedly, they will immediately dive and swim under water until they are at a safe distance or behind some friendly log, when they will come to the surface and swim away, always keeping some tree or log between themselves and the watcher after the same fashion as the Wild Turkey. I have waited for half an hour for a pair to come out from behind a tree and then to my great surprise noticed them clear across the pond. If they are in the least doubtful as to whether they are out of range, they will sink low down in the water, leaving but their bills and crests above the surface and in this way swim off.

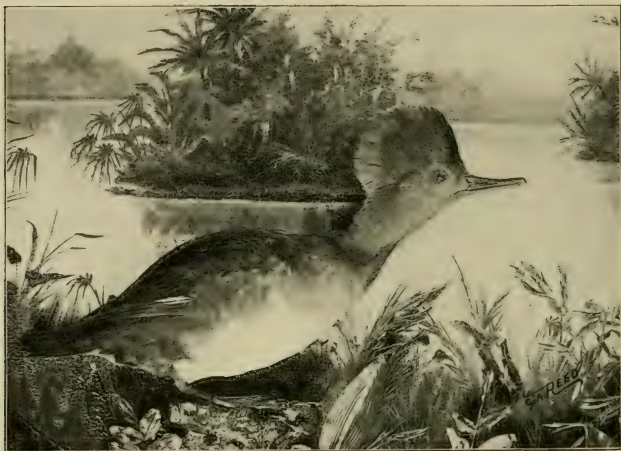
An acquaintance of mine shot one of these birds as he was flying from one pond to another. He was only slightly winged and I secured him. I had always known that these Ducks had a way of "playing possum," when wounded, but as I had never had the opportunity to see this wonderful feat, I watched him closely. It was certainly astonishing to see how closely it would imitate a dead bird. Wishing that my brothers might observe this I hastened homewards with the bird.

When near the house my dog came out to meet me and my Duck began fluttering as though nothing had ever happened to him. On entering the house the Duck "died again," and I called the whole family to view this wonderful mimic of death. They came and I am sorry to say that my own ruin came with them, for on being asked to make the Duck come to life again, I could not to save myself. He did not appear to have been injured seriously, but he never came to life again.

My diagnosis of his case was that he either died either from thinking so hard that he was dead, or in order to make me out to be a story tel-

ler. Whichever was the cause, the latter was the result, for I never was believed about his playing possum.

The female is always the first to perceive danger and is the first to dive or take flight. They are known here by the local names of Crap-pie-crown, Fish Duck and Tow-head.



HOODED MERGANSER, FEMALE.

THE CROW.

No bird is more generally known and less appreciated than the Crow, *Corvus americanus*. His tribal family is very widely distributed, and it has been given distinguished prominence in sacred and profane history, and in the legends, folk-lore, and literature of many lands.

While the Magpies and Blue Jays, like many of the human family, are more distinguished by their dress than by their manners, they and their cousins, the Ravens, Rooks, and Jack Daws, are all held in higher esteem than is their congener, the Crow, which is by common consent called the bird of ill omen. The peculiarities and eccentricities of the former, their freaks and foibles, their pertinacity and mischief, are known only to be explained, apologized for, and condoned; but no one cares to be known as the friend or champion of the Crow.

No other offense in his long catalogue of misdemeanors and crimes has earned him more deserved enmity or stimulated more relentless persecution than his warfare upon game birds. Sportsmen may truthfully be called his enemies of the superlative degree.

Whose blood would not boil at the sight, and who would not long for a weapon to reek summary vengeance upon the clamoring Crows that pounce upon, tear asunder, and beat the life out of an unoffending victim, and especially when the unoffending victim is the highly prized game bird? Such were my thoughts and such my sentiments while out trout fishing during the past season, when I witnessed such a tragedy, which I will briefly relate that it may throw additional light upon the true character of the Crow; and I shall regard it with complacency if the relation of what came under my personal observation serves to stimulate recruits to join the army which makes successful warfare upon these black marauders.

Journeying beside the brook through a piece of woodland a great commotion was heard among some crows a little distance away, and I concluded that some of their young had fallen out of their nest, or that the young brood had for the first time used their wings in flight, which is always a time of great concern to parent birds. As I proceeded their clamor grew in intensity and volume, out of all proportion to their numbers.

Arriving at a road in the woods, which was used for hauling out timber and lumber, I saw at a little distance away a great commotion among some half dozen or more crows; some darting hither and thither, —some flying upwards, then wheeling around and darting down again, —all intent upon attacking a seeming enemy, and all doing their utmost to add to the general din.

I approached quite near to them before they heeded my presence, when the more timid took flight to the nearest tree tops and became interested spectators. One, more brave than the rest, was not to be driven away, but kept striking with his beak and tearing feathers and flesh from his victim; nor did he desist and take flight until my hand was within three feet of him, when he reluctantly beat an unwilling retreat.

There before me lay gasping in the death struggle, a Ruffed Grouse hen, from the neck and back of which nearly all the feathers and flesh were stripped and torn away. Death came as a relief in a few minutes and ended the tragedy, unless perchance a brood of young were left to die of starvation or otherwise.



BOHEMIAN WAXWING.

BOHEMIAN WAXWING.

A. O. U. No. 618.

(Ampelis garrulus.)

RANGE.

This specie is found in the northern parts of North America. It breeds north of the United States and is found in winter in the two northern tiers of states. Its occurrence is irregular wherever found in the Republic.

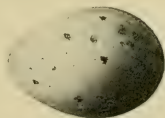
DESCRIPTION.

Length, 7.5 inches; extent, about 12 inches; tail, 2.5 inches. Feet black; eye and bill brownish, the latter shading into black at the tip.

General color, grayish brown, the forehead and sides of head, and under tail coverts being brighter, almost a reddish brown and the breast a trifle paler than the general color. Wings and tail towards the end blackish. The primaries and secondaries are tipped with white, also the primary coverts in very high plumaged birds. Often the primaries are broadly tipped with yellow forming a continuous line when the wings are closed. The throat and a narrow line crossing at the base of the bill and extending through the eye, black. The tail is tipped with a broad band of yellow and in the best of plumage, each of the tail feathers and also the secondaries, terminate with a red wax-like tip.

NEST AND EGGS.

The Bohemian Waxwing constructs a large, well built nest of leaves and bark and lined with grasses. It is generally located in a cedar or other coniferous tree. They lay four light blue eggs that are specked with dark brown.



HABITS.

This bird, the larger of the two Waxwings that we have in this country is a more brightly attired bird than the common Cedar Waxwing or Cherry bird. The Waxwings are very trim appearing birds and their feathers have such a soft texture that they look like silk.

They are strong flyers but very erratic and no definite localities can they be stated positively to visit during migrations. Their note is the same well known lisp or hiss of the common Cedar Bird but is louder in proportion to the greater size of the Bohemian. Their food is said to consist of berries, or insects taken upon the wing. They generally go in flocks of about a dozen individuals and appear to take pleasure in sitting upright upon the tops of trees from whence they utter their simple and hardly noticeable ditty.

AMERICAN MAGPIE.

A. O. U. No. 475.

(Pica pica hudsonica.)

RANGE.

Northern and western North America, from the Plains to the Cascade Mountains and north to Alaska. South in the Rocky Mountains to New Mexico and Arizona.

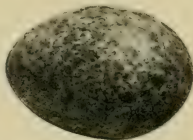
DESCRIPTION.

Length, about 16 inches varying in different specimens in accordance with the difference in the length of tail. Extent, about 24 inches; tail, nearly 12 inches. Bill and feet black. Eye, very dark brown. Entire head and neck intense velvety black. Back, wings, and tail, black with metallic reflections of green and purple. A large patch on the wing coverts and the under parts from the breast are white. as are also the inner webs of the primary quills.

NEST AND EGGS.

During April and early May, American Magpies may be found breeding throughout their range except in the more southern parts.

Among the mountains and hills of Colorado they nest very abundantly. Several nests may sometimes be found in the same tree, that is in some of the large pines. Nests may be found at varying heights from the ground, some not more than six or eight feet while others may be sixty feet. The nest is a huge pile of sticks and refuse and is arched over to form a roof, the entrance being on the side. They lay from five to eight or nine eggs, the ground color of which is grayish, yellowish or greenish white, thickly spotted and dotted with varying shades of brown.



HABITS

This near relative of the Jay is in many respects among the most interesting of all our birds. His striking plumage would immediately attract notice even if he were backwards about bringing himself to our attention. As a matter of fact, though, even if his plumage was of the plainest order and his actions were to remain unchanged, he would not allow you to remain in his vicinity for a minute without impertinently calling attention to the fact that you were transgressing upon his rights.

The Jays are rightly given credit for being daring robbers, but for



AMERICAN MAGPIE.

general thieving propensities and rascality they must bow to the superior abilities of the Magpie. They are very noisy, artful and crafty, and set up a discordant chatter at the sight of almost any creature. At all times they appear to be hostile to all forms of life, either bird or animal.

If captured when they are young they can easily be tamed, can be taught to perform many tricks, and it is said can be also taught to imitate many words. One thing they will not learn is to let alone what does not belong to them. Like a certain political party, they do not believe in the private ownership of property, unless it belongs to themselves, and will go to no end of trouble to purloin any object that takes their fancy because of its brightness or color.

Their mode of flight is by short rapid wing beats as though with considerable exertion, and their long, broad, tapering tail appears to greatly impede their progress. When an ordinary breeze is blowing it is quite difficult for them to steer a straight course and their evolutions are sometimes of a laughable character as they try to keep themselves right side up. On the ground they either hop or walk as their fancy strikes them. If suddenly startled when feeding on the ground, they will make the most frantic efforts to get out of the way as quickly as possible. It makes little difference to them as to their manner of retreat, as they appear to hop forwards, backwards, or sideways with equal ease.

If they are not hunted they become very friendly and impertinent, and numbers of them may be found around some farm houses. They will appropriate anything that they can pick up, edible or not, and in some cases become very much of a nuisance. They will eat with equal readiness, grain, fruit, insects, shell fish, fish, carrion, birds eggs, and even young birds. They are said to hunt for insects on the backs of sheep or cattle, and according to Bendire, there is some evidence that they will even peck into the backs of some of these animals at the flesh.

If it were not for their laziness where actual work is needed, they would make very good housekeepers. They have rather advanced ideas of building their nests but do not have the patience to carry them out. They realize that on many occasions a roof to their dwelling would be a very great convenience, and so put one over it. It is built in such a shiftless manner, however, that it would be full as well without this improvement. The Magpies remain mated for life and add to the same home each year until it becomes of such proportions that the winds of winter blow it from its situation.



Address communications for this department to

MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

MY DEAR YOUNG FOLKS:

My Rose-breasted Grosbeak has been singing a soft sweet song all the morning, and I think is trying to give me a message to you, so I have translated the bird notes as best I could, into English, and asked Mr. Reed to print them. I can assure you that her tale is strictly true for Peggy at this moment is sitting on my shoulder, pulling my ear, none too gentle, to demand attention, and occasionally hopping down on to the desk and seizing the pen with her bill, or trying to pull away the paper on which I am writing. She would like to sample the ink, and pecks at my hand when I drive her away. In spite of many lovable qualities, I must admit she is a saucy bird. I should like to make a list of your favorite birds for the June ORNITHOLOGY. Will the boys and girls write me which bird they like best, giving the reason for their choice. Perhaps we shall find room to print one or two of the best letters. Please send your votes before May first.

Cordially yours,

MEG MERRYTHOUGHT.

A MESSAGE FROM PEGGY.

My name is Peggoty Zamelodia Ludoviciana, and my home is a cage in a sunny window of Meg Merrythought's dining room. Every day I have a grand splash in a large dish upon the floor. I go in and out two or three times, and take a good ducking, flirting the water over my back, and over everything else for several feet. After this it takes a long time to comb every feather with my bill. I have two new gowns each year, one in the fall, the other I am putting on now, and so shall have a new smooth coat before Eastertime, though the color and trimmings will be exactly like my old one. Each day the old feathers are dropping out, and each day the tiny new pinfeathers grow a little longer. My only bright color is beneath my wing, a little yellow. My coat is a

soft brown, with a vest of whitish buff, with brown markings, light stripes pass over and beneath my eyes, and my wings show two light wing bars.

My brother who lives not far away, is clothed now in the same soft brown, but when he dons his spring plumage he will be quite a gay fellow, with black cap, black and white coat, pure white vest, and a bright rose-colored tie. This, again, will be changed next fall for the dull winter dress, and it is interesting to see the brown feathers gradually replacing the black and white ones.

Do not think of me as an unhappy captive. No, indeed! I have the freedom of the house a part of each day, and have such delightful rides on my mistress's shoulder or head. At the dinner table I have the post of honor on her hand or shoulder, and enjoy many a choice morsel. I am especially fond of oysters, of peanuts, celery and butter. One day when I was left alone in the dining room a few minutes, I made a row of pretty marks all around the cake of butter with my bill. Then they shut me in my cage, but I did not care; there are nice seeds and play-things in it. I am very fond of a fern that stands on the table, but they will not let me prune it as I wish.

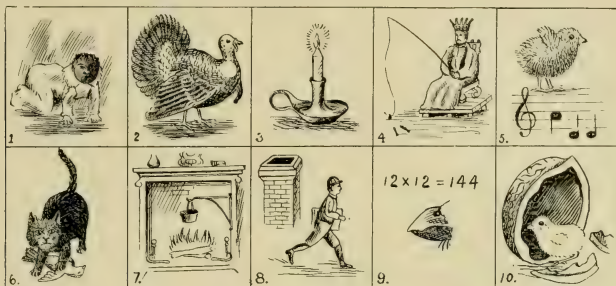
I like to seize grandma's glasses, I like to eat sunflower seeds from the hands of the children, I like to pull my master's hair and mustache, I like to pull the pins from the cushion, I like to dart across the room and catch a fly for lunch, I like to throw the matches on the floor. Oh! there are many things that I enjoy doing, but better than all else I enjoy music, and sing (in harmony, too,) whenever I hear it. I would tell you more of my good times, but it is time for a nap, and I can only add a little about a trip I took one January morning. The outside door was left open, so I flew out to see what the wide, wide world that I had seen from my window was like. I slipped around the house into some trees a little distance away. Soon I heard them calling, "Peggoty, Peggoty." But I made not a sound, and after a long time they gave up the search. I found the new world I had entered was cold and bleak and after three hours was glad to fly around to the other side of the house, where my mistress sat near a window.

I flew down onto the sill and cried "peepk, peepk," as loudly as I could several times before I attracted her attention, for she never expected to see me again. She quickly opened the window and I gladly entered, and after a warm red pepper pill, fluffed out my feathers and had a refreshing nap in my own cosy cage.

Now, little friends, I must sing to you no longer, but next summer, when all the woods are green again, and you hear the Grosbeaks making melody in the trees, do not forget Peggoty Zamelodia Ludoviciana in her snug home.

Here are the plums which Tommy Tucker found in the March "pi":
 1, Flicker; 2, forty; 3, Woodpecker; 4, Yucker; 5, breast; 6, red; 7, head;
 8, white; 9, yellow; 10, cheeks; 11, round; 12, golden; 13, brown; 14,
 ground; 15, insects; 16, ants; 17, food; 18, crop; 19, tattoos; 20, limb.

There is an opportunity for sharp eyes to discover ten birds in these pictures. Who will discover every one?



GLEANINGS.

So the Bluebirds have contracted, have they, for a house?

And a nest is under way for little Mr. Wren?

Hush, dear, hush! Be quiet, dear! Quiet as a mouse.

These are weighty secrets, and we must whisper them.

—SUSAN COOLIDGE.

All ready, close by our summer dwelling,

The Easter Sparrow repeats her song.

A merry Warbler, she chides the blossoms,

The idle blossoms that sleep so long.

—BRYANT.

JIMMIE THE JAY.

Possible some of the readers of the A. O. would like to hear about Jim, the Blue-fronted Jay, which I have had some months and which proves to be a most interesting bird. If you wish to know how he appears, just look at the picture on the cover of A. O. for April, 1901. That is a good picture of Jimmie as he will look when he gets his new feathers; just now he has a somewhat ragged appearance. He is changing his coat and the process is a slow one. I got him from a boy whose

cat caught him and brought him to the house. I keep him in a cage about nine feet square. On the south side of the roof I left a large open space to admit the sunshine on wintery days and also to allow a sprinkle of rain now and then. I gave him every comfort a captive bird can have, for I do not want him to rise up in the "limitless hereafter" and charge me with ill-treatment. So far as I can judge he has no thought of work beyond the preparation or preservation of his food. He will hide his acorns or prune pits in various parts of his house or in the ground, to be recovered when required or when softened by the moisture.

I think a prune pit is too hard for him, but you should see him open acorns. Taking one to a perch, he will hold it in both feet and hammer it with great vigor. When he has opened it he pecks it lightly, extracting the kernal and looking up, he seems to say, "It's mighty fine."

Jimmie is of a very cheerful disposition and spends much of his time at play. I gave him a new perch one day, which, as he alighted upon it, would squeak loudly. That was just what he wanted. He just jumped up and down upon that perch for about two hours, until he had jumped all the squeak out of it.

Each time I make an improvement in his house, he notices it immediately and proceeds to get all the fun he can out of it. A swing is too puerile a thing for him and he scorns to sit upon it. The only notice he gives it as far as I have seen, is to give it a kick as he flies by.

Recently I put a Cal. Jay, three House Finches and a Golden-crowned Sparrow in with Jimmie. I put the smaller birds in first and for several weeks all went well and perfect harmony seemed to prevail. Later I put the Cal. Jay into the cage, and then the trouble began. One by one the small birds were found dead, headless and featherless, until only one House Finch remained. I gave him his liberty and now have only the two Jays, and the California one is the master of the house.



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Photo by C. A. Smith.

SHORT-EARED OWL.

NIGHTHAWK.

A. O. U. No. 420.

(Chordeiles virginianus.)

RANGE.

In summer the common Nighthawk may be found in North America, east of the Plains and south of the middle portions of Canada. The Western Nighthawk, (*Chordeiles virginianus henryi*), is found west of the Mississippi River and south from British Columbia. In winter both varieties leave the United States.

DESCRIPTION.

Length, about 9.5 in.; extent, 24 in.; tail 4.5 in. Eye, brown. Bill and feet very small in comparison to the size of the bird, the former being scarcely a quarter of an inch in length, although the gape is fully an inch and a half, thus forming an extremely large mouth in connection with a very small bill. Mottled above with black, gray and tawny. Below, barred with black and dull white. A large white bar across the throat; also one across the primaries formed by a single large white spot about midway on each of the five outer primaries. A white band across the tail near the end. The female differs from the male in appearance in that the white of the throat and tail is replaced by tawny and on the latter may sometimes be lacking. The western form differs from the eastern very slightly if at all. The general average is supposed to be a trifle lighter in color than the eastern. The young birds have all the characteristic markings of the old but the under parts are more closely and distinctly barred.

NEST AND EGGS.



The nighthawks make no attempt at nest building. Their two eggs are laid upon the bare rocks or upon the rock lichens and moss that are common in localities where large boulders just peeping up above the surface of the ground are common. The eggs are mottled with varying shades of white, gray and black, and are laid late in May or during June. About large cities it is not an uncommon occurrence for these birds to nest upon the gravel roofs of large buildings. The eggs resemble very closely the rocks upon which they are laid and are difficult to distinguish. The eggs of the western bird average a trifle lighter than the eastern.

HABITS.

Throughout the United States and the southern portions of Canada, the Nighthawk is a familiar object of interest to nearly everyone who is at all interested in bird life. If he is not known by his legitimate name of Nighthawk, he is apt to be familiar under the cognomen of "Bull-bat," or "Mosquito Hawk." Not infrequently, too, he is confused with the entirely different but somewhat similar appearing bird, the Whip-poor-will, and innocently goes under the assumed name of this bird.

Woods, open fields, prairies, or even city life are acceptable to this species. During the summer months, large numbers of them may be seen about the larger cities, as at nightfall they start out on their daily trip after food. From all directions come the answering cries, given in a peevish, unmusical tone, "Spee-ek, spee-ek," a harsh, monotonous note that from long familiarity is apt to grow wearisome. Grace and skill are evident in their every movement as they wend their tortuous way across the sky, pursuing the course that is most thickly strewn with insect life. Imagine the horror of the winged insects when they see that gaping mouth following relentlessly in their wake. There is no escape for them, but they can perhaps console themselves with the unsatisfactory thought that they are furnishing renewed energy that the swift winged hawkers may more vigorously pursue their career of devastation, that results so beneficently for mankind.

The name Nighthawk does not imply that these birds fly only in the night, in fact more of them are on the wing in the day time than at night. In order that the name might have a literal meaning they might more appropriately be called dusk-fliers. Early in the morning, just after sun-down, and on cloudy days, you will see nighthawks in action of their own accord. At other times if one is seen, it is generally some belated traveller returning to his home or one that has been disturbed from his chosen retreat and obliged to seek his safety in flight.

They are sociable birds when on the wing and nearly always do their hunting in small bands. From their activity and the number of times the band will circle about a field or near some pond any one would imagine that few insects could be left within their precincts. Now one will scale across our view with all the ease and grace of a swallow; another pursues the same course with rapid wing beats after the manner of the small hawks. Just before the nesting season is when their activity is most apparent. It is at this time that the often related "downward rush of the Nighthawk" takes place. From time to time as a band of these long-winged hunters are diligently pursuing their search, one of their number having secured a position somewhat more



NIGHTHAWKS.

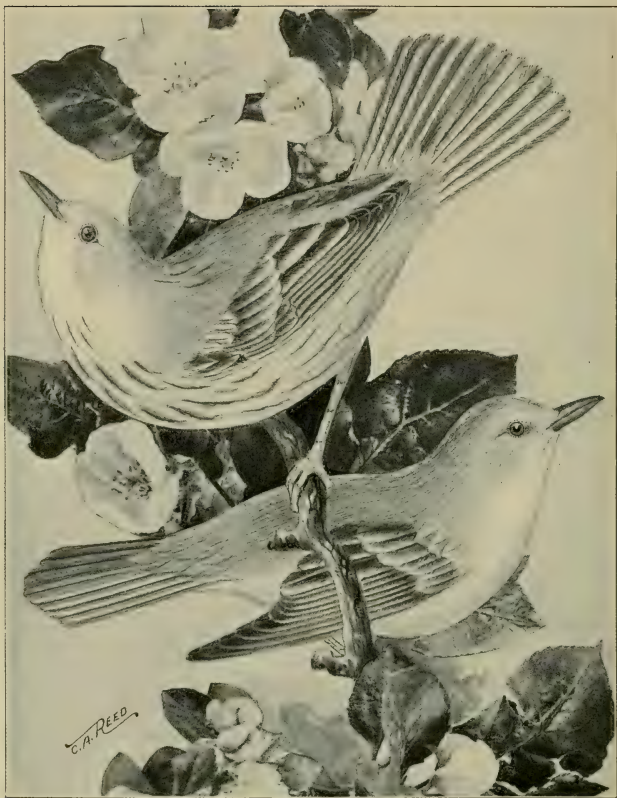
elevated than the rest, half closes his wings and makes a mighty plunge towards the earth. Down he comes with the speed of an arrow, the air hissing through his outspread primaries with a booming noise audible at a considerable distance. Just before he reaches the ground in his apparently suicidal effort, an upward fling of the tail and a change in the position of his wings and what a moment before looked like a sure death is transformed into a marvelous exhibition of skill, and the performer is again tranquilly following the rest of the band while another goes through the same performance. As this occurs just at the mating time it is generally supposed that this is one of the tests of skill that the males are made to undergo before being accepted by the fair damsels of the flock.

As an example of protective coloration, no better example can be found. So firm is the belief of the bird itself in its invisibility that nearly always they will not believe they are discovered until one actually puts out the hand to seize them. I have been all about a sitting bird without pretending to notice it often putting my foot within perhaps twenty-four inches of where the mottled ball of feathers rested. I could see the feathers on the breast rise and fall as she breathed heavily in her subdued excitement. At the first sign that I had discovered her she flew away with a low purring note. A little later when the two stone colored eggs had been superceded by two downy little chicks, she was even more loath to leave the nest. Still hoping against hope that she might be able to lead me away from her small charges she practiced all the arts the most skillful bird is capable of. Owing to her short legs and extremely long wings, her deceitful manouvers undoubtedly would prove more successful than many of the other birds that resort to such tricks. The way she would trip and fall over her own wings did appear very natural. It is claimed by some that the Nighthawk will remove the eggs or young if discovered, though I have never had any such experience.

When not in flight the birds are reposing quietly upon a rock, stone wall, roof-top, or upon a fence rail or horizontal branch of a tree; in the later cases they always sit lengthwise of the limb or rail.

Their dislike for cold weather is shown by the fact that they are among the last of the arrivals in the spring and the first to leave.

In their endeavor to get as far as possible from the severe winter weather of North America, at this time they are found distributed through South America, even to Patagonia.



YELLOW WARBLERS.

YELLOW WARBLER.

A. O. U. No. 652.

(Dendroica aestiva.)

RANGE.

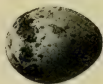
Found throughout North America except in the southwestern parts. In winter they migrate to Central America. In Arizona and western Texas, the Yellow Warbler is replaced by the Sonora Yellow Warbler.

DESCRIPTION.

Length, 5 in.; extent, 7.5 in.; tail, 2 in. Eye, bill and feet brownish. Entirely golden yellow with the back tinged with greenish. Numerous chestnut streaks on the under parts. These streaks are lacking on the female and the head is also tinged with greenish on the crown. The yellow of the under parts is also paler.

The Sonora Yellow Warbler (*D. a. sonorana*) is practically indistinguishable from the common variety. In the comparison of a large number of specimens the chestnut streaks on the sides were found to be more faintly defined and somewhat fewer in number. The habits of both varieties are the same and may practically be considered as the same birds.

NEST AND EGGS.



Yellow Warblers begin their nest building about the first week in May. The nests are generally placed in fruit trees or low bushes and shrubbery. They are most often found at heights varying from two to ten feet, while occasionally one may be found at a greater elevation.

The nest is firmly bound in the crotch formed by the union of two or more branches. It is a neat and artistic structure made of fibres and leaves and lined with plant down, feathers and horse-hair. The eggs have a greenish white ground color and are prominently marked in the form of a wreath around the larger end, with spots of varying shades of brown and gray. Three or four eggs commonly make the completed set.

HABITS.

These bright golden gems come to us from their winter retreat about the first of May, and are the forerunner of the countless numbers of jewels that are soon to follow. They are the most sprightly, sociable, and entertaining of all the beautiful warblers, to me the most interesting of all birds. Soon after the trees have commenced to take on a

green hue these spirited creatures come to add their gleams of sunshine to the beautiful mantle that is unfolding over the country.

Almost without exception every garden or orchard will be selected for the home of one or two pairs of Yellow Warblers or Summer Yellowbirds as perhaps they are fully as well known. Golden Warbler is another name often aptly applied to these sprightly and talkative little warblers. They are architects of no mean ability, and their handiwork cannot be duplicated by human hands. I think that the most artistic nest of this species that I ever met with was one built by a pair of the



birds near Warren, R. I. It was in the neighborhood of a large cotton factory and was composed entirely of cotton and lined with horsehair. This was situated in an exposed position in a small birch and must have attracted the attention of any one who chanced to go near there.

My observations have been that the Cowbird imposes upon the Yellow Warbler more often than upon any other bird in the matter of forcing them to hatch their eggs and rear their young. As the nest is small and the contraband egg of considerable size comparatively, the rightful owner of the nest cannot lay more than three eggs at the most. The chances are that even if these are not broken before hatching by the clumsy young cowbird, the young are apt to be smothered by

Photo by J. B. Pardoe.

NEST OF THE YELLOW WARBLER.

their larger and stronger foster brother. Yellow Warblers are among the most active of the family, being continually on the lookout for every passing insect as well as those that they glean regularly from the leaves and branches. When flitting spiritedly about in the bright sunlight they furnish one of the brightest spectacles in the bird world. Throughout the spring and summer months, their sharp business like chirping "Che-chee-chee-chee" may be heard at all hours of the day, provided that the weather is encouraging. They are also endowed with their share of courage and manage to keep all birds of their size under control until a Least Flycatcher appears on the scene. This pugnacious little fellow has no superior in the ring and always puts his adversary to flight.

FEBRUARY BIRDS.

Although February is the shortest month in the year, it seems by far the longest to bird lovers. But among the birds there are, even as early as February, unmistakable signs that they know that spring is coming.

On February 16th a friend and myself spent the day with the birds and saw many interesting things. When we first went out, the east had scarcely begun to brighten. As yet no bird was up; and so we had to content ourselves with walking about and wondering which one would arise first.

At a little after six we heard the first note; it was a street sparrow singing; and a half an hour later some crows called. Soon after a Blue Jay sang his peculiar song, five Golden-crowned Kinglets flew about us in some low bushes, and our bird neighbors had begun the day in earnest. As we were watching the kinglets, a Brown Creeper and Chickadee joined them and together they started on their daily rounds. As we stood watching them busily at work, we heard a drumming a short distance away, followed by a familiar call, and in a large oak tree we saw three Flickers, chasing each other, calling, and having a good time generally. After we had watched them some time, we went into a grove near by, and were immediately interested in a note which was new to us, although it had something strangely familiar in it. In the middle of the grove, on a tall elm we found a White-breasted Nut-hatch, the one which has been in these same woods since October. He was perched crosswise on the limb, uttering the laughing "Hah-hah-hah" which is his song. We then left this place and went across Charles river, on which we saw Black Ducks, Herring Gulls and Golden-eye Ducks. After we had crossed the river we visited a picturesque little

wood not far from Harvard, and here we saw five Downys, a Flicker, and a Blue Jay all in one tree. It seemed very lively there for a few minutes. A little farther on we saw two juncos. Up to this time we had been practically in the city. We had never been out of sight of railroads or electric cars, and yet we had seen twelve species of birds. But now we boarded a car and began rapidly to leave the city behind. We stopped when about half way to our final destination and wandered through the swamps and low lands, everywhere meeting little bands of Tree Sparrows. Often we saw Song Sparrows, and in one place, on hearing a familiar sound, we realized that one of them was singing to us. This was a very welcome sound, and indeed, as that handsome little bird sat singing on the topmost branch of a low bush, he must have been trying to tell us of spring.

We left the song sparrow reluctantly, and soon after I was startled, as I always am, when a Ruffed Grouse flew up ten feet in front of me. We took another car from here and went into the genuine country. We passed farms and pastures, and began to see real chickens here and there. In a favorable place we ate our lunch, on a bench set up under a great oak tree, evidently for our special benefit. While we were eating some crows flew around, betraying great curiosity, so we left as much lunch for them as we could spare, and started off to see some more birds. Out here, there were more signs of approaching spring than in the city. In one small wooded swamp, we saw several "skunk cabbages," some actually growing up through the snow. We had scarcely left these plants when we saw on the ground some gray furry pellets. There was about ten of them, and in vain we wondered what they were. At last my friend broke one open, and found two little skulls and some bones tightly packed inside; and, it dawned on us that this was an owl's home. So putting a few of these in our bag for a more careful investigation, we passed on. By the side of an old road, we saw some juncos which we watched for some time. They flew up as we approached uttering the twitter which they make in flight, and all disappeared behind some rocks in a meadow. We followed slowly and found that they were eating seeds. Soon they flew up to a friendly apple tree where we left them. This ended an unusually delightful day. We had seen fifteen species, three of which sang, and as we were nearing home, we noted that the moon had a golden ring, and we were thankful for having had such fine weather all day. When I awoke next morning everything was white with snow.

CANADA GOOSE.

A. O. U. No. 172.

(Branta canadensis.)

RANGE.

Throughout temperate North America, breeding in the Northern United States and the British Provinces. Migrates south of the United States in winter.

DESCRIPTION.

Length, about 3 feet; extent, 5 feet; tail, 7 in. Eye, brown. Bill and feet, black. The general color above and below is a brownish gray, rather lighter on the under parts and changing to white on the belly. Head and neck, intense black. A broad patch of white extends across the chin and upon the sides of the head, back of the eyes. A small white spot is generally on each eyelid. The rump is whitish and the tail black.

NEST AND EGGS.

According to the nature of the localities or the individual dispositions of the birds, Canada Geese build their nests upon the sand, among the taller grass away from the water or on brush heaps or low trees. When placed upon the ground it is only a hollow scooped out of sufficient size to hold the three to eight eggs that are laid. A few sticks are sometimes added around the circumference of this hollow, probably more from force of habit than from any advantages to be derived therefrom. When they build in trees they either use a deserted heron's or osprey's nest, merely adding material enough to make it tenantable. The nests are always softly lined with quantities of down. The eggs are of a dull, brownish, green color.





CANADA GEESE.

HABITS

The Canada Goose is universally conceded to be the king of American game water fowl, and twice a year, during the spring and fall, migrations has to run the gauntlet of all the sportsmen from one extreme of the country to the other. So great a prize are they considered by the sporting fraternity that many who would object strenuously at being compelled to do a few hours work, will labor uncomplainingly in the hot sun for several days and expend much money, time and patience, that they may be the cause of the early and violent demise of a number of these grand birds. Thus during both migrations the life of the wild goose is a hard and dangerous one and so many of them fail in the attempt to run the gauntlet that unless new game laws are made within a short time, few flocks will be left to announce the coming of spring. Even if it is absolutely necessary that man should be allowed to gratify his desire to kill, the geese and all ducks should at least enjoy the privileges of being protected during either the spring or fall migration, and given a fair chance to preserve their race.

The migratory flight of the Canada Geese is one of the most interesting and spectacular sights in the ornithological world, and has been the theme of much literature, both verse and prose.

"Honk, honk," the sound comes faintly from a great distance, gradually drawing nearer and nearer, sounding not unlike the baying of a pack of hounds in full cry. You drop your work and hasten out of doors. You are not alone; from every house and shop in the neighborhood, men, women and children come rushing to witness the coming spectacle. You can imagine the astonishment of one not initiated in the ways of birdology to see this vast throng all gazing, open mouthed, towards the southern horizon, in which direction he looks in vain to discern the cause of gathering. Soon his eye perceives a thin black line faintly outlined against the sky and close to the horizon. The line grows larger and in a few moments he learns that it is composed of birds, large birds, and that they are flying in the shape of a wedge. As they sweep by overhead, added to the noisy honking is the beating of a hundred or more wings, and the long converging lines, headed by an old gander, appear smaller and smaller as they draw away and at last the vision fades from view in the distance.

The goose is an affectionate parent and is very fierce in the defence of its young. They are believed to remain mated for life. They sub-

sist mainly upon berries and grain. When migrating, they assemble in flocks, which, uniting, form vast columns, each section being headed by a leader. When about to alight, pioneers descend from the flock to select favorable and safe feeding grounds. Having decided upon the proper place they swoop rapidly down upon it with the wind, pass over to see if the coast is clear, and then return against the wind to alight. While on the ground the flock is guarded by sentinels with a zeal that renders a close approach impossible. The fact that they are so easily decoyed seals the fate of many of them. Gunners take advantage of their well known feeding habits, and early in the morning set their decoys in some popular grain field. These decoys are made of wood, pasteboard, or sheet iron, and bear more or less resemblance to geese. Having concealed himself behind a brush heap or blind of cornstalks, the gunner awaits the coming of his victims. It doesn't take an expert to kill a goose by this method.

ACCIDENTS.

Birds are victims of accidents fully as often as are members of the human race. Most of them are simply minor ones, such as broken wings or legs, and with a little careful nursing on the part of the bird, are as good as new in a few days. Besides the lesser accidents, the number of fatalities that occur among the feathered population (from purely accidental causes) is appalling. Thousands upon thousands of birds are killed yearly by flying into telegraph wires or against light-houses. I make mention of the following that were actually observed by human eyes.

My nearest neighbor, early in April, was poking about among the weeds in a neglected flower bed. This bed was found to be by measurement twelve feet from the house. Suddenly from almost under his hands, flew a Bob-White. In its excitement and fear it took no notice of direction and struck against the side of the house, which by the way was painted white. He was picked up dead.

Dr. M. of Monticello, while making a professional call seven or eight years ago, saw two large flocks of prairie chickens flying in opposite directions, about to cross the road in front of him. There was a collision high in the air and one chicken came down dead. No wire. Simply a collision in mid air. The doctor showed me the chicken and remarked at the time that I never could guess how it had met its death. It was a cloudy day and snowing at the time, which probably will account for this casualty.

Identification Chart No. 4.

Warblers prominently marked with *Yellow*.

No. 655, Myrtle Warbler, (*Dendroica coronata*).

Length, 5.5 in. Very common in eastern North America, becoming less so as you approach the Pacific. They breed chiefly north of the United States and winter in the southern portions. Frequently called the Yellow-rumped Warbler. Large white patches near the end of all the outer tail feathers. Two bars on wing.

No. 656, Audubon's Warbler, (*Dendroica auduboni*.)

Length, 5.5 in. The United States west of the Plains and north to British Columbia. Differs from the Myrtle chiefly in the yellow throat in place of white, and in the gray ear coverts where the Myrtle's are black. Known as the Western Yellow-rump. Large white spots near end of all outer tail feathers. Large white patch on wing.

No. 657, Magnolia Warbler, (*Dendroica maculosa*.)

Length, 5 in. North America east of the Rocky Mts. Breeds from the northern tier of states to the Hudson Bay territory. In winter chiefly south of the U. S. Top of head gray, back, black; rump yellow; tail, black; each feather except the middle pair having a large square spot about midway. Called often the Black and Yellow Warbler.

No. 685, Wilson's Warbler, (*Sylvania pusilla*.)

Length, 4.75 in. North America from the Rocky Mountains to the Atlantic and north to the Hudson Bay and Alaska. Breeds north of the United States. Wings and tail unmarked. Often designated as Wilson's Black-cap. Subspecies;—No. 685a Pileolated Warbler, (*S. p. pileolata*.) The Pacific coast from Alaska southwards. The yellow on this variety is somewhat brighter than in the Wilson's.

No. 686, Canadian Warbler, (*Sylvania canadensis*.)

Length, 5.5 in. From the Plains to the Atlantic and from Newfoundland and Labrador southwards. Breeds from New England northwards. Wings and tail unmarked.



Yellow and Chestnut Warblers.

No. 650, Cape May Warbler, (*Dendroica tigrina*,

Length, 5.25 in. Northern North America east of the Plains. Breeds from the United States northwards. Winter south of the United States. Ear coverts, chestnut. A large white patch on the wing, and three outer tail feathers with white spots near end. The female lacks the chestnut ear coverts and the under parts are pale yellow. White patch on the wing is smaller and less distinct.

No. 652, Yellow Warbler, (*Dendroica aestiva*.)

Length, 5 in. Very common throughout North America except in the southwestern part. Breeds throughout its range. Subspecies;—No. 652a. Sonora Warbler, (*D. a. sonorana*). Replaces the Yellow Warbler in southern Arizona and western Texas. The female of both birds is similar to the male, lacking the chestnut streaks below.

No. 659, Chestnut-sided Warbler, (*Dendroica pensylvanica*.)

Length, 5 in. Very common and breeds in eastern United States and southern Canada. Migrates in the fall chiefly south of the United States. Female has much less chestnut on the sides. The young are plain olive green above and white below, with faint yellowish wing bars.

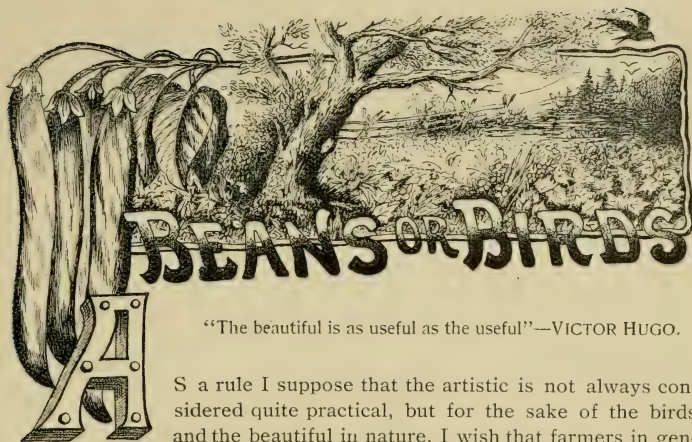
No. 672a. Yellow Palm Warbler, (*D. palmarum hypochrysea*.)

Length, 5 in. The Atlantic States to Hudson Bay. Breeds from Maine northwards. Winters in the Gulf States. No. 672, Palm Warbler, (*D. palmarum*). Interior North America to the Great Slave Lake. The yellow of the under parts paler than in the Yellow Palm, and the streaks dusky instead of chestnut. Both varieties have white spots at the tip of the two outer tail feathers.

No. 673, Prairie Warbler, (*Dendroica discolor*.)

Length, 4.75 in. The United States east of the Plains. Breeds from southern New England southwards. Back with a patch of chestnut spots in the middle. Large white blotches on the outer tail feathers.





"The beautiful is as useful as the useful"—VICTOR HUGO.

AS a rule I suppose that the artistic is not always considered quite practical, but for the sake of the birds and the beautiful in nature, I wish that farmers in general were less devoid of it, also less addicted to that too all-prevailing propensity that impels them to desecrate every fence corner by trimming it to the extremities of neatness. The everlasting pruning hook and scythe strikes terror to bird and flower as well as to the hearts of their human devotees. If there were advantages to be gained by this devastation, well and good, for a farmer's lot is none too easy at the best, and one can not blame him for utilizing every inch of his tillable area, but will no artistic sense teach him to leave in nature's hands the inaccessible hillside and corners, the steep ravines and wood-lot boundaries that are such delights to the feathered folk. The Department of Agriculture has given us convincing evidence of the usefulness of bird neighbors in their economic relations to us, so why not show them a little gratitude in return by leaving to them such undergrowth that is needed for the security of their young. In many sections of the old world, the farmers plant common cherries and lower grades of small fruits in order to induce the birds to locate near their farms, appreciating the benefit they will derive from the destruction of the enemies of their cultivated fruits. Since we are, as a nation becoming so conspicuous as defenders of the oppressed, why not exhibit a little of our beneficent charity to the natives of the soil?

An incident occurred last summer that is illustrative of the attitude of the farmers in general. I chanced upon one of the workmen on a neighboring farm who was cutting down a great tangle of bitter sweet, that overhung a steep hill side overgrown with underbrush, and which had encroached upon the cultivated land for perhaps ten feet. The

only reply that I could get in answer to my expostulation was:

"He wants beans!"

"But he can not raise beans under the shade of those oak trees," I answered, but he only reiterated:

"He wants beans."

So I tried to incite him with a little compassion for the noble vine that is none too plentiful in this section, owing to other provident mortals who "want beans."

"Is yer bitter-sweet good fer anything? What can ye do with it," he finally interrogated, and of course I was nonplussed, for the vine is neither "fish, flesh, fowl, or good herring," and I knew that my arguments in favor of the beautiful and artistic would not appeal to him in the least, so I went on my way while he continued to lay waste without let or hindrance.

In this tangle was growing the young shoots of sassafras, so dear to the vireo family, for underneath their leaves dwell countless caterpillars of the papilio astereas, which in the early stages are beloved of the red-eye, and also there was an abundance of the lesser fly, dear to the heart of the warbler family. Here too I saw my first chestnut-sided warbler, a veritable Joseph in his coat of many colors, yet very neat and dapper, notwithstanding his crazy quilt like combination of the different shades. Here again I saw the dandy of the same family, the black-throated blue, who is really the Beau Brummel of the birds. All of the warblers have a characteristically "pointed" appearance, all their corners being rounded to a V as it were, beak, wing points and tail, furred trim and ship shape, but the black-throated blue's the most so of all. To this same bitter-sweet comes the earliest blue bird bringing on his back our first glimpse of the summer sky. Underneath its shelter were born, bred and bullied by a little brown mother, six tiny representatives of the wren family, who were early cut adrift from the parental nest to become the blacks and tans of feathered society, and by the way, only a short distance from here, a sagacious little house wren allowed the limb in which she had built her nest, to be cut off and carried to a distant tree, and fastened to one of its branches, without disturbing her equanimity or household arrangements in the least, and continued with her business of incubation as unconcernedly as though she were an old stager at spring moving.

In a great oak above the tangle a pair of crows nested, and were a continuous source of annoyance to three king birds, who must have made life something of a burden to them, for I seldom ever see a crow returning nestward without a kingbird in front of him distracting his attention, while the other two kept up a series of petty attacks in the

rear. But I never saw any evidence of retaliation on his part, only an assumption of serene and dignified indifference to his assailants.

Aut alas, what was once the abode of winged happiness and dissension is now but a patch of brown stalks and stunted pigeon-grass, but I am glad to record that the crop that thrived so well under the tillage of Thoreau, did not "yield" in this instance, and the industrious farmer who "wants beans" in return for the bitter-sweet, will have to seek them elsewhere.

ALBERTA FIELD.

TRIALS AND TROUBLES OF BIRDS.

Birds generally are rightly credited with having a good stock of common sense, but occasionally we come across one who is sadly deficient in this respect. A pair of Flickers spent a good deal of time and as much more hard work on the shaft box of an old wind mill that had had all the machinery blown off. The box was in the top of the tower about twenty feet from the ground. The birds sounded it and found it was hollow so they decided that they had found an unusually good location for their nest. By going to the top of the box they could have seen clear through it, but they began work about eighteen inches from the top, and hammered away until they had made a hole large enough for them to enter. Poor birds, they must have been considerably surprised and humiliated to find that their intended house had neither roof nor floor.

I have always felt sorry for the little Screech Owl when the woodpeckers returned in the spring and found that their old nesting sites were occupied and that the present owners were engaged in the quiet occupation of setting. The poor little owls had to get out and hunt mice every night and then be bothered all day by a pack of woodpeckers who scratched and clawed up and down the tree. How poor Asios ears must ring when they pound on the hollow place just above the nest, and then every once in a while, one of them will poke his head into that hole and say mean things to the occupant. And when several came at once they would talk so harsh to each other, bobbing their heads and uttering that rasping call, just like the whetting of a scythe. But the owls had possession and did not leave until after the Flickers had gone to bed at night, and they always got back before the woodpeckers got around in the morning.

A. K. BOYLES.

THE
WAKENING.

As I cross the fields, climbing a wall here and a fence there, pausing to watch a muskrat slip into the water from a river bank, and to examine a cocoon that is waiting on a bare twig for the warm sunshine to change it from an inanimate thing to an airy, gorgeous creature of wings, I am conscious of the wonderful transformation going on around me, the awakening of the world from its winter lethargy. Its throb is in the grass blades under my feet, in the swelling branch tips, in the new tinge which is daily, hourly, changing the earth's surface, in the very brook whose waters have a quickened, freer flow. It is whispering, rustling, buzzing, singing, calling from all sides, around and above. The very sky has a new color, the earth a warmer glow, as though there were veins through the soil which were quickening into life.

From a hole in a fence post a bee has crawled dully into the sun. He is weak, attenuated, dull of color from his long winter in the darkness of the past, but even as I look, with the warm sunlight resting upon him, he visibly enlarges, and his colors grow brighter and more life-like. Presently he quivers his wings, weakly at first, but with more and more strength until he has raised them erect. Then he tests one leg after another, thrusting them out doubtfully, as though they might be numb with cramp, but apparently gaining confidence with each new effort. Already he seems like a new creature, and I know that before my return he will have flown away in search of food or others of his kind.

Along the way are curious little finger-size plants, which rise from the ground and curl their fuzzy yellow-green tips into tight balls. The country folk call them "brakes," perhaps because they break at the slightest touch, and they gather and eat them as "greens." A few more warm days and the tightly closed balls will unwind and straighten out into delicate, feathery fronds of graceful ferns. They are scattered thickly along the way, especially in places that have been burned over the year before, waiting with bowed shoulders and coldly clasped hands for the warm days, which the blue birds have told them will soon come.

One of these blue birds is watching me now, almost with a fellow feeling and understanding it seems, for he is first on one side and then on the other, hopping from the swelling tip of an alder bush to the ground, running across the path behind me, and then flying on with a well modulated "I, I say, look at this," to a decayed log a rod or so in advance. Surely he



knows that I am out to greet the newcomers for whom he has been watching these weeks past, and just as surely he realizes that he is able to give me an abundance of interesting information. What a companionable little fellow he is, and how plainly desirous of congenial company. I wonder if he has a mate, or if he has not yet begun his courting. Perhaps he has daringly come on ahead of all the rest, and is lonely and glad even for a human being to companion with. Or perhaps this warm, wondrous thrill of the awakening is in his heart, as it is in mine, and he feels nothing but love and fellowship for all things around.

As I approach nearer, his head cocks on one side and his tail bobs up genially, and only when I am within a few feet does he hop to a low branch, scarcely an arm's length away. Nor does this seem a movement of fear or distrust, but rather as a stepping aside for me to look at something which he has to show.

One end of the log rests across a heap of stones, and upon the stones the sun is lying warm. At first I see only a small green lizard which has partially crawled from beneath the bark and is now lying in the sunshine, its eyes blinking in the very ecstasy of contentment. It is another of the creatures which the sun is awakening.

But plainly it is not the lizard that attracts my friend's attention. He is raising and lowering his wings with ill-suppressed eagerness, and hopping from one end of the branch to the other. And he is not looking at the log at all, but at the stones beyond. "There it is," he plainly chirps, "there, there, there."

Over the warm stones a dozen or more tiny forms are twisting about joyously. At first they appear to be worms, though unusually active; but a closer inspection reveals them as snakes. They are not more than three or four inches in length, and too small to determine the

species. The mother is not in sight; doubtless she is off foraging, with the little ones left to play among the warm stones.

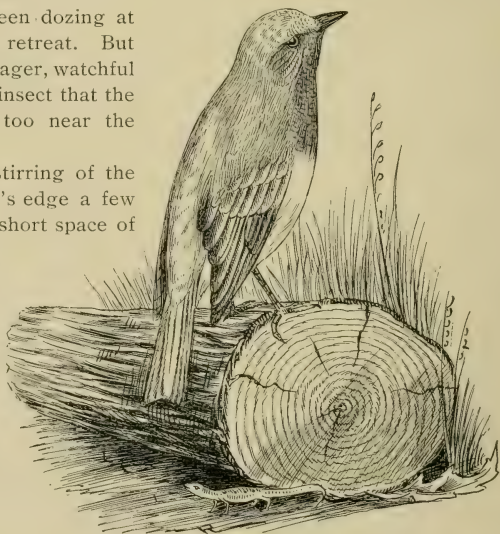
Here on a south sloping bank is a small colony of plants, some of them already beginning to show flower. A chump of dogwood has only a deeper tinge of red to its bark, as some of the birches have a deeper yellow. But over there a pussy willow is clothed with a halo of fully developed catkins. No wonder it raises its head proudly above the bare limbs of its fellows, for is it not a pioneer in this tide of spring stirring and longing?

A little farther and a brook crosses the path, spanned by a well worn log. I pause on the bank to watch the water as it gurgles and rushes on its way, scarce able to contain its joy within the narrow banks. There is the pure water of bubbling springs in its tide, the melting of mountain snow, the elusive fragrance of arbutus and wood violets. A pussy willow bends its tips to the surface as though to be kissed, and from the opposite bank a green robed damsel lifts eyes that are glistening with liquid pearls.

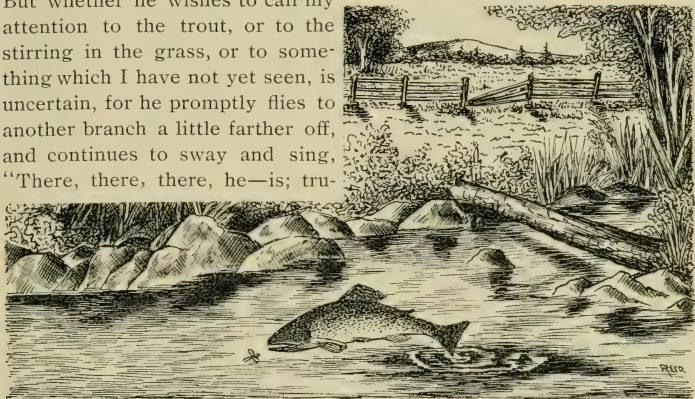
At first there seems to be no foreign life within the dancing waters, but as the stillness is prolonged, a speckled trout flashes from some covert and poises in mid stream, apparently without motion in the swift, flowing current. Perhaps he has been awake all winter, somewhere down there under the ice, or perhaps he has been dozing at times in some safe retreat. But now he is alert and eager, watchful for any unfortunate insect that the warmth may entice too near the brook's surface.

There is a slight stirring of the grass near the water's edge a few yards below; then a short space of almost unnatural stillness, and the stirring is repeated. Some water animal, perhaps out for his first spring reconnoitering, is trying to escape unobserved

But he has not yet reckoned on



the keenness of spring eyes. Suddenly, from above my head, comes an eager, "There he is; there, there, there," and looking up I see my friend the bluebird swaying excitedly upon a slender branch, again almost within arm's length. Evidently he has followed me, either to observe what I might discover, or to give assistance, as in this case. But whether he wishes to call my attention to the trout, or to the stirring in the grass, or to something which I have not yet seen, is uncertain, for he promptly flies to another branch a little farther off, and continues to sway and sing, "There, there, there, he—is; tru-



ally, pu-ri-ty, pu-ri-ty, I—oh, pu-ri-ty."

I continue to watch the grass for sometime, but there is no further stirring. Probably the unknown animal has slipped into the brook and is swimming beneath the surface. When I turn back to the bluebird he is industriously pecking at a rough piece of bark. Presently he draws out a long white grub which the sun has not yet awakened, and swallows it. The grub is thus cut off from the great spring awakening, but perhaps his loss is the bluebird's gain, and through the bluebird the world's, who knows?





LEAST TERN.

A. O. U. No. 74.

(Sterna antillarum.)

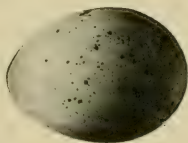
RANGE.

The Least Tern may be found breeding in favorable localities from California, Minnesota, and New England southwards.

DESCRIPTION.

Length, 9 in.; extent, 20 in.; tail, 3.5 in., forked for about half of its length. Eye, brown. Bill and feet, yellowish, the former tipped with black. Back, wings and tail, pearl gray. Two outer primaries, black. Top of head black, separated from a black line that extends from the bill through the eye by a white crescent across the forehead and continuing up to the eye. Sides of head and under parts pure white. In winter the bill is black and the black of the crown is broken up into a few streaks. The mantle of the back is much darker than in summer.

NEST AND EGGS.



The Least Tern builds no nest whatever, and often even does not take the few moments necessary to scoop a small hollow in the sand, but will lay her eggs upon the beach among stones and pieces of shell. The color of the eggs harmonizes remarkably well with that of the sandy beach and it is very difficult to see them even at a short distance. Their breeding range is now limited to the few localities where they have not always been harassed to death, and islands along the Atlantic coast where they formerly nested by hundreds are now desolate.

The eggs most commonly have a buff ground color and are specked evenly over the surface with black, brown and lilac markings. The two or three eggs which they lay are deposited early in June.

HABITS.

Although this species is the smallest of the American Terns, it is none the less dexterous upon the wing. Its much shorter and less deeply forked tail, rather serve to detract from its grace of movement, when compared to some of the larger varieties.

While this diminutive member of the tern family can with equal facility perform all the intricate manouvers common to the terns, it seems to lack the strength and power of endurance of many of its relatives.

among the family. In stormy weather they appear to be unable to stand the buffeting of the gale and often are obliged to alight on the land where resting with their heads facing the winds they await the coming of more agreeable weather. They may be considered rather more a bird of the interior than of the sea coast. Vast numbers of them are found about the lakes of the Mississippi Valley, while most of the other varieties of terns spend the greater part of their lives around the salt water, some of them even venturing to a great distance upon the ocean.



Photo by Wm. H. Fisher.

EGGS OF LEAST TERN.

They reach the northern limits of their range during the first part of May and leave again early in Sept. They migrate either in pairs or small flocks, generally at a great elevation, and either by day or night. They are sociable among themselves and not generally timid. They will probably never again be as abundant as formerly before the ladies conceived the unfortunate idea of using them as hat adornments.



Address communications for this department to
 MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

MY DEAR YOUNG FRIENDS:

Our feathered friends are coming thick and fast; how glad we all are to see them again. Many of them make us but a little social call on their way north where they make their summer homes, but they are now wearing their best clothes, and singing their sweetest songs.

On looking over my note books, I find there were about fifty birds which greeted me in my May wanderings last year. No wonder that the birding fever is easily caught during this fair month.

Charles Rogers of New York City was the first to successfully straighten out the March "pi". He reports the arrival of the Crow Blackbird on March first, and the presence of Robins, Fox Sparrows, and a Hermit Thrush, all winter. The latter must have found an attractive spot and kind friends to have lingered thus behind their mates.

We print an account of a pair of Clapper Rails given by one of our young folks in R. I.

Have you put up the box-homes for the Wrens and Bluebirds?

Goodbye till we meet in the month of roses, and decide which bird we like the best.

Your friend,

MEG MERRYTHOUGHT.

The birds represented in the puzzle pictures in the April Ornithology were: 1, Black and White Creeper; 2, Ovenbird; 3, Flicker; 4, Kingfisher; 5, Chickadee; 6, Catbird; 7, Crane; 8, Chimney Swift; 9, Grosbeak; 10, Nuthatch.

NUMERICAL ENIGMA.

I am composed of 11 letters. Alas, you will find my 11-7-9-5 in South Africa and South America at the present time, always accompanied by

my 4-8-10-7-3-1. My 11-7-5-6-1 you may find to your sorrow in grandmother's attic. My 1-6-2-10-3-1 you will find on the breakfast table. My 8-7-4-5 are often worn by beggars. My 4-8-2-11-5 is what your little sister does. My 1-6-7-9-5 are parts of a vessel. My 6-8-10-3-4 is part of a fork. My whole is a bird beloved by us all.

A SUMMER ACQUAINTANCE.

"What is that noise I hear every morning when I am getting breakfast?" asked mama one morning in May. "What is it like?" I asked. "Oh, it is a clucking, screeching sound, like a man clucking to his horse, only louder and more prolonged, and seems to come from directly up the marsh."

"I think," said I, "that it is one of our summer neighbors, Mrs. Clapper Rail, just moved into the marsh." About two hundred yards back of our house is a salt water marsh which is a favorite feeding ground of the herons, spotted sandpipers and rails. I had heard these sounds myself and I made up my mind that a pair of Clapper Rails were nesting close by, and determined to find the nest.

At high tide I took my boat and rowed around awhile, but could find no sign of them. When the tide had gone down, I took off my shoes and stockings and waded out to search more closely and again failed to find the nest, though I saw the birds skulking about among the grass tufts on the other side of the marsh. After I gave up the search, I could hear them chuckling and cackling as if they were rejoicing over my defeat. I kept a pretty close watch over them, aided by my field glasses, but though I could see them feeding, and hear their note, I could not locate the nest.

One day in June I asked my father to take me to the Islands so that I might study Herring Gulls. He said that I had a good subject nearer home, so I determined to try again. I went straight for the highest tuft of grass on the marsh, when suddenly, up flew Mrs. Rail with a sort of startled cry, about four or five feet in front of me. She flew to a fallen cedar tree, and it was not many minutes before I was looking into her pretty home.

The nest was made of grass a little above the water, and was arched over with thatch. It contained eleven eggs of a creamy color spotted with reddish brown about the larger end. The bird was dark in color, with long legs and neck. The next time I visited the nest, it was abandoned, and I suppose a brood of young rails were following their mother about the feeding ground.

This is probably their permanent summer home, for I remember

hearing them there the year before and no doubt they reared a brood then. They have never been disturbed and I anticipate their return this spring with much pleasure. BONNIE BUCKHAM (aged 15).

THE WARBLERS.

With the first May flowers come the Warblers. Most of them tiny sprites in gay plumage, who dart about as if to make the most of their short sojourn with us. Why they are called warblers has always been a puzzle to me, for surely the name is not suggested by the half whispered, lisping notes, or the shrill insect like sounds which constitute the song of this class of birds. We may except the song of the Ovenbird, for the hour when you first hear the liquid melody of the ovenbird as he sings to his mate at twilight will never be forgotten.

The Summer Yellowbird which spends the summer with us repeats "sweet" seven times over; the Redstart has a like story to tell but tells it in three syllables; look for him among the snowy blossoms of the cherry trees, and note the charming contrast he makes in his vivid orange and black, as he opens and closes his fan-like tail.

The Maryland Yellowthroat cries "witchery, witchery, witchery" from the tangles all summer long, and the way that he succeeds in concealing his nest in the depths of the tangle, seems indeed to savor of witchery.

These and half a score more of the warblers stay with us, while their companions hie away to our Canadian borders to nest, passing our way again in the Fall, on their return journey, hundreds of miles, to the sunny South, with their increased families.

Always in motion, with many resemblances in size and color, the warblers are the most difficult of all our bird friends to learn.

I am sure you will miss a great amount of pleasure if you fail to put some of these dainty folks on your calling list this summer.

GLEANINGS.

They'll come again to the apple tree
Robin and all the rest,
When the orchard branches are fair to see
In the snow of the blossoms dressed.
And the prettiest thing in the world will be
The building of the nest.

—From "The Building of the Nest."

By MARGARET E. SANGSTER.

THE MYTH OF THE SONG SPARROW.

His mother was the Brook, his sisters were the Reeds
And they every one applauded when he sang about his deeds.
His vest was white, his mantle brown, as clear as they could be,
And his songs were fairly bubbling o'er with melody and glee.
But an envious Neighbor splashed with mud our Brownie's coat and vest.
And then a final handful threw that stuck upon his breast.
The Brook-bird's mother did her best to wash the stains away,
But there they stuck, and, as it seems, are very like to stay.
And so he wears the splashes and the mud blotch as you see,
But his songs are bubbling over still with melody and glee.

—ERNEST THOMPSON-SETON, in "Bird Lore."

THE BIRDLESS WOOD.

I stood in woods 'mong leafless trees
One noisy winter's day:
The winds were not like summer's breeze,
I thought my hands and feet would freeze
Before I went away.

But long I looked with eager eye
For some little happy bird;
And ne'er was heard the Blue Jay's cry,
Nor busy Woodpecker pounding nigh,
But only winds were heard.

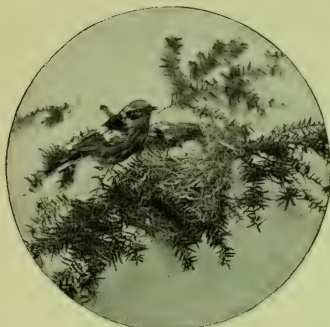
"O, where, my darling, friends of glee,"
I broken hearted cried:
"They fly no more from tree to tree
To warble songs that gladden me—
Oh, whither, do they hide?"

I almost wept for spring again,
For sunshine, warm and sweet;
For the cherry songsters' mellow strain
That calms me in the hour of pain,
Or makes my joy complete.

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THE BIRDS' PICNIC.

The birds gave a picnic, the morning was fine,
They all came in couples to chat and to dine;
Miss Robin, Miss Wren, and the two Misses Jay,
Were dressed in a manner decidedly gay.

And Bluebird, who looks like a handful of sky,
Dropped in with his spouse as the morning wore by;
The Yellowbirds, too, wee bundles of sun,
With the brave Chickadees came along to the fun.

Miss Phoebe was there, in her prim suit of brown,
In fact all the birds in the fair leafy town.
The neighbors, of course, were politely invited,
Not even the Ants and Crickets were slighted.

The Grasshoppers came, some in gray, some in green,
And covered with dust, hardly fit to be seen.
Miss Miller flew in with her gown white as milk,
And Ladybug flourished a new crimson silk.

The bees turned out lively, the young and the old,
And proud as could be, in their spencers of gold,
But Miss Caterpillar, how funny of her,
She hurried along in her mantle of fur.

There were big bugs in plenty, and gnats great and small,
A very hard matter to mention them all.
And what did they do? Why they sported and sang
Till all the green woods with their melody rang.

Who e'er gave a picnic so grand and so gay?
They hadn't a shower, I'm happy to say;
And when the sun fell, like a cherry ripe red,
The Fireflies lighted them all home to bed.

“Home Songs”



PURPLE GRACKLE.

GRACKLES.

We will include the Purple Grackle and the two sub-species under this heading. The habits of the three varieties are very similar and the same illustrations will answer for either. The only differences are in the matter of size of the Florida Grackle and in the different color reflections of the other two, matters that can not be shown in the illustration. They are all commonly known in their several localities as Crow Blackbirds.

PURPLE GRACKLE.

A. O. U. No. 511.

(Quiscalus quiscula.)

RANGE.

Chiefly east of the Alleghanies along the Atlantic coast from Florida to Massachusetts.

DESCRIPTION.

Length, from 12 to 13 inches; extent, about 18 inches; tail, from 5 to 6 inches. The tail is very much rounded, the outer feathers being about an inch and a half shorter than the middle ones. Bill and feet, black. Eye very pale yellow almost white. Entire plumage, black. The iridescence is very variable but is most intense during the breeding season. The entire head and neck have brilliant purple and blue reflections. The wings and tail are steel blue, and the back and under parts have a duller and rather greenish iridescence.

BRONZED GRACKLE.

A. O. U. No. 511b.

(Quiscalus quiscula aeneus.)

RANGE.

This variety has by far the greater range and is found throughout the U. S. east of the Rocky Mts. and in southeastern Canada.

DESCRIPTION.

This bird is precisely like the former in size and form. The only difference being in the iridescence, which appears to be nearly the reverse. The head is steel blue and the wings and tail purple, while the back and under parts have a very brassy reflection (from which the name aeneus is given to it) that is always lacking in the Purple Grackle.

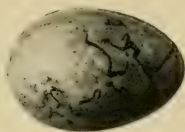
FLORIDA GRACKLE.

A. O. U. No. 511a.

(Quiscalus quiscula aglaeus.)

RANGE AND DESCRIPTION.

Found along the south Atlantic and southern Gulf coasts. This variety is from an inch to an inch and a half shorter than the preceeding. Otherwise it is almost exactly like the Purple Grackle.



NEST AND EGGS.

The Grackles build large bulky nests of twigs, grasses and mud. They are generally placed on horizontal bough preferably especially where only a number are nesting, on coniferous trees. In some localities large colonies of them breed together, but scattered throughout their range will be small bands of perhaps a dozen individuals which nest in some small clump of trees. They are not afraid of man's domains and will very often build their nests in trees in the yard. They lay from four to six eggs, the markings of which vary very greatly. The ground color is bluish white and is blotched and streaked with dark brown and fainter patches of lilac.



Photo by Ross Nicholas.

YOUNG PURPLE GRACKLES.

HABITS.

Although the Bronzed Grackles appear to winter in Arkansas, they are much more abundant during spring and summer, especially about corn planting time. At the time when they are most abundant here, they may be seen at late evening or early morning in vast numbers flying to or from the roosting ground. I have watched them for hours at a time without seeing any decrease in their numbers. Often one massive flock two or three hundred yards in width and over two miles long were in sight. As a general thing two or three such flocks would lead the procession, followed by numerous smaller flocks of several hundred individuals, until as darkness fell only a few belated stragglers would be left in sight.

It is quite an experience to visit the roosting place of these huge flocks of blackbirds. Just as the sun becomes a dull red and appears to pause a few feet above the horizon before taking its departure for the night, one standing near the roosting place casts his eye eagerly in all directions to catch the first sight of the coming hordes.

Suddenly as if from behind the clouds the black and moving mass sweeps onwards to within perhaps two hundred yards of the roost, when suddenly as if obeying some order not heard by the observer, the whole flock breaks up into smaller flocks of three to fifty individuals and darts into the bushes with a whizzing noise not unlike that made by the escape of steam from a leaky valve. After the first rush the bystander is a fixture unable to move, unable to withdraw his gaze although his eyes fairly ache with the strain. Fixed to the spot, with senses lulled to slumber by the incessant chirping and the intoxicating whizzing of the tens of thousands of wings above his head, the weary gazer is asleep to all sounds and conditions, save the ones in which he is engulfed and long after the last straggler has found a resting place this would be naturalist gazes up at the vacant dome above, but a few moments before filled with countless numbers of animate creatures. Then as if aroused from his stupid slumber by some sound or movement, he suddenly starts, rubs his eyes and slowly feels his way out of the tangle of the thicket, for darkness has crept upon him ere he is aware of it.

This roosting place is generally some impenetrable thicket and also serves as their breeding place. I call to mind one of these roosts which as far back as I can remember has been very popular with blackbirds, both the Grackles and Red-wings. It is a thicket of young cotton wood and willows on a sand bar of the Arkansas River. It is so thick that a rabbit must have some difficulty in traversing it, and I have seen this place literally dotted with the nests of these two species.

This grackle is also omnivorous to a great extent, eating flesh, grain, fruit and insects alike. In summer when the ponds are drying up one may see numerous blackbirds diligently fishing for crawfish, which now constitute nearly their whole diet. In time of wild cherries I have often caught these birds, they being intoxicated from eating too many. I have kept one in captivity for two or three weeks feeding it large grasshoppers alone, it taking them with an eagerness that showed a liking for this peculiar diet. True the blackbird does great injury to young corn and no longer ago than last spring I was forced to stand guard over a corn field on their account. The birds had caused my father to have to plant over twenty acres a second time. I did not kill many however, for it was only necessary to shoot at them a few times morning and evening to prevent them doing much mischief.

If they do harm in the spring it is entirely counterbalanced in the late summer if cotton worms happen to invade the fields. On these occasions one may see the blackbirds rolling over a field much in the same way as wild pigeons, the tail end birds always rising and alighting in front. Thus the birds are ever on the move. They seem some scarcer in this locality than a few years back, probably from the fact that the breeding places on the sand bars are being cleared off for cultivation. They feed the young birds on insects entirely when very young.

J. K. THIBAULT.

A COWBIRD'S NEST.

As ornithologists and all bird students think and believe that the Cowbird will build no nest but always lays in the nests of other birds, I am glad to give the results of my experiments. In order to get the desired results, in the spring of 1899, I secured a pair of Cowbirds and placed them in a large cage, cared well for them, and supplied them with plenty of nesting material. To my surprise the female built a nest, layed four eggs, hatched them and reared the young, and on July 28th young and old all were given their freedom. This will show that the Cowbird will build a nest and care for its young in captivity, while in its wild life it has never been known to.

Another queer incident that came to my notice was on June 2, 1901. While strolling through a pasture, I observed a bird flying to the ground and disappear. I recognized it as the Chimney Swift, and being anxious to know what had become of it I at once went to the spot and found an old well about fifteen or eighteen feet deep above water. About ten feet from the ground was the bird resting on a nest with four eggs. I have never heard of a similar situation before.

JOS. F. HONECKER.

THE CASTLE.

Come with me into our garden where you can see the bird houses, nesting boxes and the real nests not made with hands. The largest house which we call the castle is occupied in summer by Martins, and if it has never been your good pleasure to hear their strange songs and observe their maneuvers I am sure you could spend an hour or two with them and not weary with their entertainment.

The "*Progne subis*" or Purple Martin belongs to the family "*Hirundinidae*" or Swallows. It is their largest representative and measures eight inches in length. The adult males are shining blue-black, but in the sunshine look decidedly purple. The females are grayish, tinged with steel blue above, lighter below. They are eminently insectivorous, consequently highly migratory. Their long pointed wings afford them wonderful aerial ability, enabling them to take their food while on the wing with wondrous ease and grace. Their song is very humble, little more than deep toned love talk, but is expressive of tender emotions.

To some observers the song seems quite ridiculous and indeed is rather amusing when an old male tries to give expression to his ecstasies by a low, hoarse trill. The charm of the Martins is not in their song, but in the tender devotion of the mated pairs, the parental love and care displayed to the little ones in the nests, the sociability of large flocks, and their wonderful homing instinct. My notes tell me that they arrive in scattered flocks from April 16th to 28th and leave from August 12th to 20th, seldom varying three days from the first named date of arrival. They seem so glad and happy to get back to their pleasant summer home, the dear old home of their birth, that they announce their presence by loud demonstrations of joy and it is many days before they become settled down like well regulated families. As each colony arrives and their numbers are being perceptibly augmented, difficulties arise between them concerning the choice of rooms, as there are twenty-eight apartments and thirty-two windows in the house, and they all prefer the rooms on the north and east as these are nearest the water and meadows, and on the opposite side from our house. For many days there is a perfect babel of noises, harsh, strong, scolding notes are uttered to all intruders, and gentle little love notes from the same old veterans to the favored ones they have chosen for their mates. The nests are made by a few sticks pasted down by a bit of mud, just enough to keep the little ones from falling out of the house. As each brood is hatched the curiosity of the adult members of the colony is greatly incited, and for several hours they stand in flocks at the doors gazing either in admiration or wonderment at the new little babies;



THE CASTLE.

presently the irate father forgets that they are all one great family and exponents of sociability and intimacy and spreads his wings, ducks his head, and with open mouth forcibly and vociferously ejects them from his private domain.

Twenty or thirty usually return in the spring and when they are ready to start for their southern home we can easily count seventy-five or more. We have the only flock of Martins in the town, although there are many attractive Martin houses. The secret lies in forcing out the House or English Sparrow. Most of the other houses are occupied by the Sparrows which have completely driven out the Martins. I have not observed that the Sparrows make open warfare against the Martins, but by their filthy habits about the boxes, and by robbing and mobbing they completely dishearten them and drive them from their abodes.

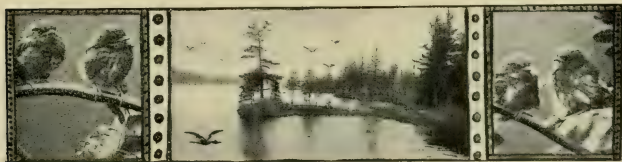
At another time I will tell you about our Bluebirds and Tree Swallows and hosts of other beautiful little winged creatures that find refuge near by home.

FRANCIS, B. HORTON, Brattleboro, Vt.

A HOUSE WITH TWO STORIES.

Last May a little Maryland Yellow-throat built her nest in a raspberry patch by the roadside. It was made of bits of bark, tendrils and grass, and lined with finer grasses and horsehair. Just as it was completed and the little birds off for a nice breakfast, Mrs. Cowbird, who has a bad reputation, gained by her lazy habit of building no home for her offspring, but slyly depositing her eggs in the nests of smaller birds, came stealthily through the bushes from the top of a tall tree from which she had been watching the construction of the little nest with a great deal of interest. After a hasty inspection she decided that it was a safe home for her future offspring. The egg was left and Mrs. Cowbird hastened away as slyly as she had come. On her return the Maryland Yellow-throat was much disturbed to find the large egg in her little home, but she was wiser than many of her small neighbors for most of them do not seem to mind the intrusive egg but go right on about their housekeeping, and of course, the young Cowbird, being so much larger than the rightful occupants soon crowds them out of their home and keeps the poor tired little mother on the move to supply it with food. So for every cowbird a whole nestful of insect eating birds are sacrificed. But of course nature planned the Cowbird for some purpose and we are learning that its food consists of injurious spiders and insects, and seeds of obnoxious weeds. These little Yellow-throats after much scolding decided to outwit the Cowbird, so very soon they were very busy building a platform over the large egg, and in a short time had a very imposing two story mansion. They worked very steadily indeed, until it was finished, and then flew off for a short outing before beginning the real cares of housekeeping. No sooner were they gone than back came Mrs. Cowbird and laid another egg in the top story. When the owners returned and found that all their labor had been fruitless they were furious and left the nest never to return. I do not know where they made their next home, but trust that they may have reared their family in peace.

REST H. METCALF.



FOX SPARROW.

A. O. U. No. 585.

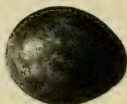
RANGE.

(Passerella iliaca.)

In the United States this sparrow is found east of the plains, but in Canada it is found distributed irregularly from the Atlantic to the Pacific and from Alaska and the Arctic coast southwards. It winters in the southern part of the United States and breeds north of our border.

NEST AND EGGS.

The Fox Sparrow nests either in small trees or on the ground, most often in the latter location. The nest is made of grasses and moss and lined with finer grasses and feathers. The eggs are laid during the latter part of June. They are pale greenish blue blotched and speckled with reddish brown. They lay four or five eggs. Size .90x.65 in.



DESCRIPTION.

Length, 7 in.; extent, 11 in.; tail, 3 in. Feet, pale brown. Upper mandible dark; lower yellowish. Eye brown. The general color of the upper parts is a rusty red, this color being strongest on the rump, wings and tail, and the remainder of the upper parts being mixed somewhat with gray. Under parts white, thickly covered except on the belly with spots of reddish brown, these being mostly in the form of arrow points. The wing coverts are edged with whitish forming two narrow wing bars.

HABITS

The Fox Sparrow is the largest and is by many considered to be the handsomest of the whole family. Considered strictly in accordance to their inches in length, one or two others may be considered his equal in size, but this variety has a larger body, and his shorter tail accounts for his shortness in length.

During the latter part of April flocks containing hundreds of these bright fox colored birds are scattered over the northern parts of the United States. These flocks do not tarry in one place more than a day but continue their journey northwards. For about a week, however, there does not appear to be any diminution in their numbers, for when one flock leaves there is another to take its place. When on these migratory journeys they are very sociable with one another and I have never seen one of them quarreling with another. They take their food entirely from the ground and only leave it to hop to a low twig or a



FOX SPARROW.

stone to see who is coming, and then return to their gleanings. Save for the rustling of the leaves, and by the way one would think that a whole army of men were the cause of this noise instead of a few score of little birds, they are very quiet during their travels. An occasional sweet thrill from some unusually happy individual is the only specific warning of their presence until they are disturbed by the undesirable presence of strangers when the whole flock will unite in loud chirpings. How little we can tell of the real home life of a bird from the scant observations that we are able to make as they hasten past us on their way north. The Fox Sparrow during the nesting season is said to rival the thrushes in the brilliancy of his song. His song is more varied and the tones sweeter and purer than any of the thrushes and in addition his sociable ways with mankind have placed him high in the esteem of all bird lovers.

THE LODGING OF THE WHITE-BREASTED NUTHATCH IN WINTER.

This annual resident is one of the most industrious little fellows that I know, and always inspires me with an ambition to be up and doing myself. He is out all sorts of weather, for no matter how it blows, storms and snows he can find a sheltered side on the tree where his work is, and in the midst of all his busy searchings for food he forgets not to utter his cheery work-a-day ditty, so helpful to the observer in locating his presence and position. Many a time in a blinding, driving snow storm have I observed this little ball of feathered assiduity, diligently searching the sheltered side of the great pines and firs of the forest as sprightly and cheerily as though all nature were at peace and the warm sun beaming down. At such times his presence is a real inspiration and a delight, especially if the observer chance to be snow bound in some log cabin in the wilderness.

He is not a gregarious bird in either his nesting or working habits, and I had always supposed that he were a solitary householder in his lodging habits, at least that no more than himself and wife occupied the same apartments, unless it be occasionally with some friendly neighbor, or through misfortune. I never even supposed that he occupied the same lodging twice in succession except it be in the nesting season.

So little do we sometimes know of the habits of our most common bird neighbors that it was nothing short of a revelation to me one evening when coming home late from a winter gunning expedition, to learn that this whilom friend of mine had a regularly appointed lodgings of aristocratic proportions, done in natural wood, where all the birds of

the order in that vicinity spent their nights in social and mutual warmth and comfort. Their palatial lodging was a great yellow pine that had been dead so long that its bark had disappeared. There was a weather or wind crack in its trunk just by the side of a knot, about ten feet from the ground, which served as the front door to the lodgings, and as it opened to the east by a quarter south it would get the first rays of dawn as they lighted the woods in that vicinity.

By some chance I stopped near this tree, and while standing there a lone Nuthatch alighted upon the knot, went into the crack and out of sight. He had hardly disappeared before a second one alighted in the same place and vanished within the same doorway. Number two had scarcely gone before number three appeared upon the scene and followed the other two. I became interested at once and determined to see the end of this ornithological procession and stood attentively watching.

They continued to arrive, singly, as if by predetermined appointment, one after another until twenty-nine had come and disappeared within the spacious apartments of this one coniferous aviarian domicile, and at no time during all the lodgment of these twenty-nine birds, did two arrive at the same time, nor was there a variation in the time of the appearance of any two birds of more than thirty seconds. Such clock like punctuality seemed marvelous to me, and is but another instance of the remarkable development of the faculty, if I may so term it, of time in birds.

Unfortunately I never had an opportunity to follow up my observations in this matter, and cannot say whether this gregarious habit of lodging with the White-breasted Nuthatch, is a local or a national trait, neither can I tell you whether these birds were all of one family or many; whether they got up in the orderly and chronological manner in which they went to bed, nor yet if they occupied the same lodgings the following winter together with their summer's posterity, and least of all whether when the tree became unsafe from the decay of its roots, they sought out some other and safer habitation for their winter rendezvous.

G. V. HARVEY, M. D. Watsonville, Cal.

It should be noted that one of the best methods of attracting birds is to have sunflowers planted near the house. In the fall these will furnish abundant food and quite a variety of birds will be observed improving the opportunity thus afforded them. In a small garden plot a few feet from my study windows, I have a considerable number of sunflowers. Last fall long after they had lost their brightness, they continued to draw large numbers of birds. I was particularly interested

in the Goldfinches, to whom large seeded plants of this sort are a great delight. They had lost their black caps and their golden yellow had faded to a much duller hue, but their cheery notes, and their evident delight in the toothsome dainties helped to make a charming scene. With them came flocks of Bluebirds with their gentle twitterings, sparrows of different sorts, and individuals of other species. These few flowers furnished a feeding ground until well into the winter and served to brighten many a dreary day with glimpses of animated bird life.

F. L. GRANT.

AN UNEXPECTED VISITOR.

On February 11th I was walking in a marshy strip of land near Boston, when a Kingfisher flew from some low trees nearby. Alighting in a tall oak, he looked around for a few minutes, then flew away towards a larger stretch of marsh land. I wondered where he found food as all the ponds near there were frozen; but his loud rattle as he flew away did not sound as if it were uttered by a starving bird.

Guy Emerson.

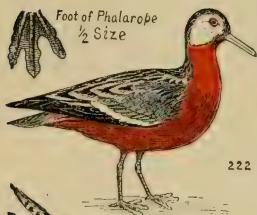
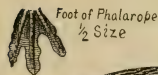
Robert of Lincoln is gaily drest
 Wearing a bright black wedding coat,
 White are his shoulders and white his crest.
 Robert of Lincoln's Quaker wife
 Pretty and quiet, with plain brown wings,
 Passing at home a patient life,
 Broods in the grass while her husband sings
 Bob-o-link, bob-o-link,
 Spink, spank spink.
 Brood kind creature, you need not fear
 Thieves and robbers while I am here.
 Chee-chee-chee!

BRYANT.



Identification Chart No. 5.

Brilliantly Colored Shore Birds.

A. O. U. No. 222, Red Phalarope, (*Crymophilus fulicarius*.)

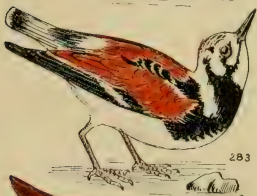
Length, 7.5 inches. Breeds in the Arctic regions and migrates in winter to the middle portions of the United States, along the coast. Head and around bill sooty. Rump, white. Bill, quite stout. (In winter.) Head all around and entire under parts white. Toes edged with a scalloped membrane which is united at the base making them semipalmate.

A. O. U. No. 223, Northern Phalarope, (*Phalaropus lobatus*.)

Length, 7 inches. Breeds in the Arctic regions and winters in the tropics. Bill slender, but not long. The rusty red of the neck almost meets in the back. Rump, gray like the back. The sides, spotted with gray. A very broad white bar on the wing.

A. O. U. No. 224, Wilson's Phalarope, (*Phalaropus tricolor*.)

Length, about 9 inches. Inhabits temperate North America, breeding from middle United States northward chiefly on the interior. Migrates to South America in winter. Bill very long and slender. The rich chestnut of the sides of the neck extends in a faint shade across the breast. Rump, white. (In winter.) Black stripe on the side of head and neck is very faint and the chestnut almost lacking. The lobes on the feet of this variety are much less pronounced than on the two previous ones. All three varieties are good swimmers and the two former are frequently found in large flocks far out at sea.

A. O. U. No. 283, Turnstone, (*Arenaria interpres*.)

Length, 8.5 inches. Throughout North America. Breeds in the extreme north. Tail, rump and tail coverts, white, the former with a black band near the tip, and the latter with a black patch in the center. Secondaries and coverts very broadly tipped with white. In winter these birds almost entirely lack the chestnut and the black is broken and grayish.

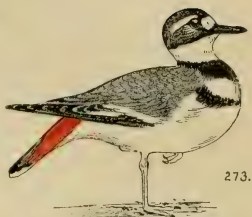
A. O. U. No. 288, Mexican Jacana, (*Jacana spinosa*.)

Length, about 8.5 inches. Mexico and southern Texas. Head and neck, greenish black. Secondaries and inner webs of the primaries, greenish yellow. Remainder of body, a rich purplish chestnut. Bill, frontal leaf and spur on the shoulder, yellow. Tail, very short, not as long as the coverts. Legs long and greenish black. Toe nails extremely long.

Ring-necked Plovers With Only Three Toes.

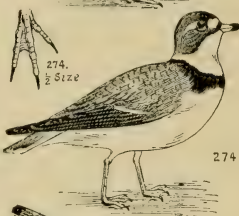
A. O. U. No. 273, Killdeer, (*Aegialitis vocifera*.)

Length, 9.5 inches. Temperate North America, breeding north to southern Canada. Bill, quite long and black. Upper parts, brownish gray. Two black bands across the breast. Rump and tail coverts chestnut.



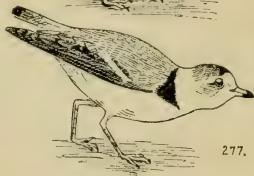
A. O. U. No. 274, Semipalmated Plover, (*Aegialitis semipalmata*.)

Length, 7 inches. Breeds in the arctic regions and migrates to tropical America. Bill, short and black tipped. A single black band encircles the neck. Foot webbed between the outer and middle toe, to the first joint.



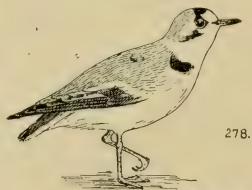
A. O. U. No. 277, Piping Plover, (*Aegialitis meloda*.)

Length, 6.5 inches. Eastern North America, breeding from Virginia to New Foundland. Very broad white band across the forehead. Bill, short and stout black tipped. Black crescent on each side of the neck, not meeting on the breast or back of neck. Tail, white with a black tip.



A. O. U. No. 278, Snowy Plover, (*Aegialitis nivosa*.)

Length, 6.5 inches. From the Mississippi Valley westwards and from northern California southwards. Bill, quite long and slender, black. Small black crescent on each side of the neck. A narrow black stripe back from the eye. Back, very light gray.



A. O. U. No. 280, Wilson's Plover, (*Aegialitis wilsonia*.)

Length, 7.5 inches. Both coasts of the United States. Bill, quite long and stout. A broad black band across the breast.



BARTRAMIAN SANDPIPER.

A. O. U. No. 261.

(*Bartramia longicauda.*)

RANGE.

Quite abundant throughout North America. North to Alaska and Nova Scotia. Breeds throughout its range, but chiefly in the northern parts. Migrates south of the United States and into South America.

DESCRIPTION.

Length, 12 in.; extent, 23 in.; tail, 3.5 in. Bill and feet, dull yellowish. Above, black, all the feathers having tawny edges. The secondaries are barred regularly with black and brownish. The rump and tail are brownish, the latter shading through orange brown to white on the outer feathers and being barred regularly with black. The tawny color of the upper parts extends across the breast. The rest of the under parts are white. The breast and sides are marked with arrow shaped spots.



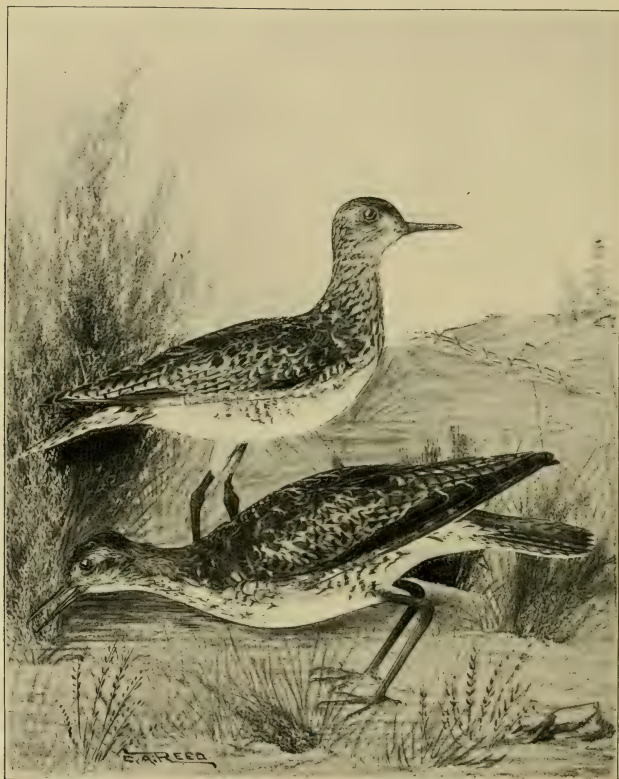
NEST AND EGGS.

This Sandpiper breeds abundantly on the western prairies and throughout Canada. Its nest is a hollow on the ground in which four eggs are laid. These are of a more or less bright buffy color and are heavily spotted and blotched with brown, particularly about the larger end. They breed frequently in pastures and on hillsides.

HABITS.

There are exceptions to nearly every rule. We generally think of a Sandpiper or Plover as a bird of the marsh or beach. Most of them are, but the present species is one of the few that prefer a different mode of life. The broad prairie or hillsides and pastures are their favorite abiding places. There may be water within easy access, but if so, the locality is not chosen because of it as they are just as often found breeding miles away from any supply. Unlike the shore Sandpipers their food consists almost entirely of insects and seeds.

On the prairies in their breeding grounds they are very fearless and



BARTRAMIAN SANDPIPER.

do not appear to realize the danger of too great an intimacy with mankind, at least the greater part.

These Sandpipers are much sought for by gunners during those seasons of the year when they are allowed to slaughter shore birds. During migration the birds have a peculiar liking for some particular hill-side. Although there may be many other localities close by that to all appearances are equally suited to their needs, they will never be found on these. One pasture within the city limits is a favorite stopping place for them and every night during the migration period a number of them will drop in here towards morning and spend the day in feeding preparatory to taking up their journey the following night. Every one that puts in an appearance has to take his chances with the dozen or so, more or less marksmen that frequent this pasture from the time that the first bird arrives till the last one departs.

Their note is a two syllabled drawn out whistle and may be frequently recognized during the fall migrations, at night, along with the chirps of the many smaller birds that are passing over at the same time. The names Upland or Grass Plover, or Prairie Snipe are probably more familiar to the majority than that of Bartramian Sandpiper. The birds however are the same.

OOLOGY.

To me the study of the eggs of birds is next to the study of the birds themselves. Darwin's theory shows that related species are descendants from a common ancestor. Therefore the eggs of these descendants would naturally show a common likeness unless they were powerfully influenced by environment or by other circumstances. Thus the eggs of the Robin and the Thrushes are similar; also the eggs of the Kingbird and the Wood Pewee, the Thrasher and the Wrens, the Bobolink and the Cowbird, etc., while the eggs of the Catbird and Thrasher, the Bank and Barn Swallows, and the Meadowlark and Oriole are much different from each other. These differences are caused mainly, I think, by the necessity of protection. An egg which from its situation has no need of protection is usually white, as the fowl and the Owls. The Bluebird, unlike the other Thrushes, builds in the holes of trees. Its eggs need no protection and are gradually becoming white instead of light blue. I found many nests containing white eggs last year and have heard of others in distant localities. The Phoebe's eggs have been through the change once already and are now turning back to their original color. Before the discovery of America the Phoebe built in holes of cliffs and rocks and the eggs were white. Now they build in sheds, under bridges, etc., and their eggs are gradually speckled with brown.



PHOEBE.

PHOEBE.

A. O. U. No. 456

(Sayornis phoebe.)

RANGE.

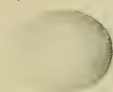
The Phoebe is found from the Rocky Mountains eastward and from the British provinces southward. They winter along the Gulf coast and breed throughout their range in the upper half of the United States.

DESCRIPTION.

Length, 7 in.; extent, 11 in.; tail, 3 in. Bill and feet, black. Eye brown. Upper parts brownish gray, very dark on the head, almost black. Under parts dull white, the sides grayish, this color sometimes extending across the breast. The outer tail feather, secondaries and coverts edged with white.

NEST AND EGGS.

Early in May the Phoebe builds its nest of mud, twigs and moss. The nests are located on the rafters of buildings, under bridges, or on narrow shelves of ledges. Four or five plain white eggs are laid although frequently a set will be found that has more or less numerous specks of black, mostly towards the larger end.



HABITS.

A plain colored, demure looking bird. He shares with the Robin, Bluebird, and Blackbird, the honor of being the first arrival from the winter quarters. Were it not for his energetic voice he would pass unnoticed among the numerous other birds that are found in the same haunts. He is a very interesting bird and after having watched him for some time and listened to his emphatic "phoebe, phoebe", each syllable being accompanied by a flirt of the tail, and accented now on the first syllable, now on the last, we begin to wonder why Phoebe does not answer his entreaties or as he seems so anxious to see her, why he does not look her up. This is not Phoebe's only note for I have heard a low sweet, affectionate trill as he hovered for an instant before the ledge where Mrs. Phoebe was silently sitting.

The Phobes are devoted to old associations and will make their home in the same place year after year. I know of more than a dozen locations within two miles of home where I can depend upon finding a

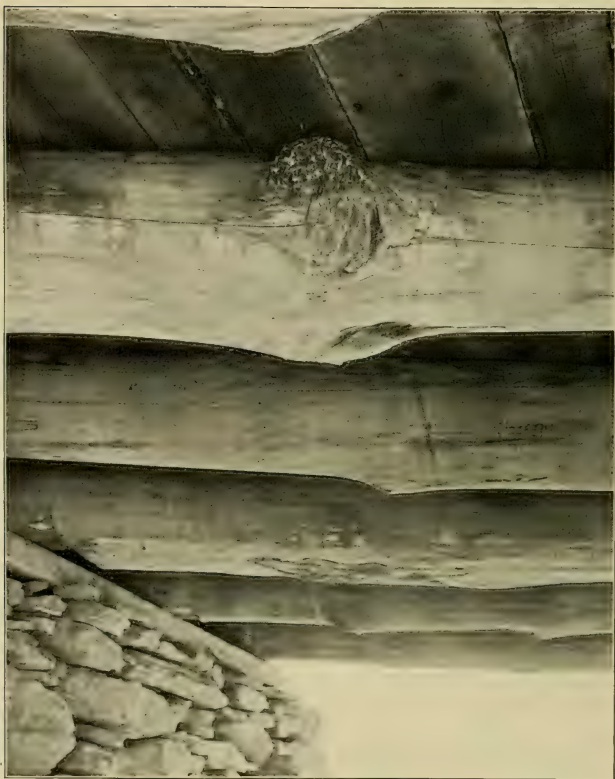


Photo by C. A. Reed.

NEST OF PHOEBE UNDER BRIDGE.

nest of the phoebe, pewit or pewee, all of which names are applied to the same bird. Early in May I started out with my trusty friend, the camera, in order to photograph a Phoebe's nest. I had in mind one of the most beautiful and picturesque spots in the country. A brook, one that has long been the Mecca of many local anglers, winds its circuitous way across fields, through woods, under roadways, until just before it empties into the lake it passes through a ravine and under several rustic bridges. This is one of the richest localities for bird products in this vicinity and within sight of its banks may be found breeding nearly all the perching birds known to inhabit here.

Phoebe did not disappoint me and some time before I came in sight of the old bridge I heard amid the babble of the early arrivals, his familiar call. I found that the birds had already completed a new rustic moss covered nest, fastened securely to the third cross log under the bridge. These birds or others have had nests under this bridge for years. They vary its location from year to year and the old one nearly all falls down during the winter. What strange situations birds will choose in which to rear their families. Numbers of teams pass over the bridge daily and one would not think that a bird would enjoy having a horse's hoof pounding the boards not more than an inch above its head, especially as the bridge is old and somewhat shaky. The accompanying photo of the Phoebe's nest was taken with the tripod standing in the middle of the brook, (the operator incidently having an insecure, single-footed position on the sharp edge of a projecting rock). The detail in the picture was obtained in the darkness under the bridge by a small stop and a minute's exposure.

That those who are from any cause unable to take outings, might see one of Nature's beauty spots, I decided to photograph the bridge, as this is a typical spot for a Phoebe's home. One of the birds was in sight all the time, busily engaged in the dexterous pastime of capturing all insects that flew by. He was continually changing his position and when I was prepared to take my picture, he was occupying a lookout that was within range of the lens, and can be seen in the illustration, just above the roadway and about half an inch from the left of the picture. I should like but have never had the opportunity to witness the young phoebes first flight. Unless they are more dexterous than the young of most birds on the maiden attempt, they must be very wet and bedraggled looking specimens when they reach the shore.



Photo by C. A. Reed.

WHERE THE PHOEBE BUILDS.

WITH THE BIRDS AT DAWN.

The glorious month of May is again with us; the month of beautiful awakening; of blossoms, birds and song; the month of inspiration and rejoicing. Only those who have the opportunity to go and see for themselves can fully realize and appreciate the scenes and sounds which one cannot express or describe.

An hour with the birds at dawn; how much it means at this season of the year, when all is activity and bustle among Nature's creatures. Out with the rise of the sun, when nature is donning her gayest robes of the year, and when the dew of Heaven is glittering like thousands of precious gems. At no time can one better enjoy an hour with the birds; just fresh from their night's rest, they all break forth in a volume of combined and harmonious song that is beyond description; it is well worth going miles to hear, yet it is free to all.

The observations recorded in this article cover a series of walks taken by the writer in the early morning during the first two weeks of May. A few minutes stroll brings one within the borders of a rich meadow; and what a landscape! Stretching away in the distance is a line of rolling hills, some of them crowned with apple orchards in their prime of bloom; on another side one could see the delicate tints and harmonious blending of the young leaves on the forest trees, while under your feet was a soft carpet of fresh, young meadow grass, profusely sprinkled on every hand with the pale blue and rich purple of thousands of violets, while here and there the golden chalice of an early buttercup was nodding in the breeze.

Passing along the edge of a grove, I observed a number of Towhees. Some were busily engaged in scratching among the dead leaves, now and again uttering their pleasant "Chewink, Chewink;" others would mount the tall trees and indulge in a more elaborate song. They were very tame and I had an excellent opportunity of observing them. I also heard the shrill whistle of the Great-crested Flycatcher and the harsh cry of a Blue Jay. While passing some brush piles in this grove, I counted five White-throated Sparrows; Song Sparrows were also abundant and added their sweet notes to the general concert. A pair of Chipping Sparrows were taking a drink from a little brook and they raised their tiny heads as if in thankfulness that they had such clear, sparkling water with which to allay their thirst. The Field Sparrows too, appreciating the beauty of these mornings and the happy life around them, sang out "Oh see-see-see," with a pretty trill to the last of each syllable.

Coming to a swampy region, I found the Red-wing Black Birds numerous, and they continued to call "Kon-ker-ee" from tussocks and sway-

ing branches. The Meadow Larks also were flying to and fro and occasionally one would mount the tip of a tall tree and pour out the fullness of his joy in sweet song. Leaving the swamp and passing on to another portion of the meadow where there were two or three large oak trees and considerable undergrowth, I observed a number of Gold Finches in a bunch of alders and they were calling to each other "dearie dearie," in most loving terms; what a pretty contrast—their rich black and bright yellow mingling with the vivid green of the young leaves. On a fence post near by, sat a little House Wren, and he was fairly bubbling over with song and motion, while Mr. Chat up in the oak tree would feign have you believe there were a dozen or more vocalists there instead of one. It is truly amusing to watch the droll actions of these birds and to listen to their wonderful mimicry. The Brown Thrasher was also in evidence and endeavored to rival the Chat in the variation of his song. I next heard "Chebeck, Chebeck" coming from a tree near by, and while I could not catch a sight of the bird, I knew it to be one of the smaller Flycatchers. Barn Swallows and Chimney Swallows were circling in the air, and a pair of Flickers raised serious objections as the writer came near to an old maple tree in which they had their nest—the top being decayed and broken away.

The cheery call of the Maryland Yellow-throats resounded on every hand and the low bushes and sedges along the run were fairly alive with flitting bits of bright color. While engaged in gathering some wild flowers, the writer tried imitating their note and soon had a goodly number of them near at hand, their curiosity getting the better of them. A Cat Bird also came to say "good morning" and to announce that he had but recently arrived from the South.

From a woodland at some distance off, the sweet strains of the Wood Thrush's morning hymn was wafted across the vale, and the clear, rollicking song of the Carolina Wren came from the same source. I also heard one single note of an Oriole but did not succeed in locating it. Thus in about an hour's time during each of the morning walks in question, I had the pleasure of meeting and listening to from twenty to twenty-five different birds. All these feathered people will soon be selecting their nest sites and engaged in building their little homes according to their respective habits. Oh that everyone finding these little homes—which are just as dear to the birds as our homes are to us—would bear in mind that within each pretty egg are the possibilities of a happy life and a cheering song; that each one taken or destroyed, means a corresponding decrease in the number of wild birds which should inhabit our woods, fields any waysides.

BERTON MERCIER



Address communications for this department to

MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

MY DEAR YOUNG FOLKS:

I know that you have been having a good time since I wrote last. Who could help being glad as he watches the changes creeping over the brown earth; the bright flowers peeping from every nook; the wonderful cloaks of white, pink, red, and soft green which are thrown around the trees which have been bare so long. And as a crowning joy to this delightful season, a host of gay birds warbling their songs of love, have appeared during the last month.

We have been greatly interested in the affairs of a family who have moved into a tenement next to us (they are true blue.) Ere they had completed their house-furnishing a pair of thievish English Sparrows who had rented a cottage near by, decided that the sticks selected by Mr. and Mrs. Bluebird were just what they would like, so went in and helped themselves when the pair were out marketing. Our little friends in blue would not stand that. No, indeed. As soon as Mr. and Mrs. English had their backs turned they marched boldly in and carried the sticks home again. For a week the sticks were carried back and forth from nest to nest, in this manner, till at last the perseverance of the Bluebirds won the day, and they were left in peaceful possession of their own house, while Mr. English was content to sit on his own veranda and saucily chirp, "I don't want to play in your yard." Mr. Blue did very little of the work in fitting up the new home—perhaps he could not do it to suit his wife—but kept close by her, singing a soft, sweet accompaniment as she worked. As I write he is busy carrying delicious morsels to the little mother who is patiently guarding four blue eggs.

We have a long list of questions to puzzle you this month and if you can answer them all you are certainly entitled to a place on our Roll of Honor. Who will be the first to send me answers to them all?

Cordially your friend, MEG MERRYTHOUGHT.

The answer to the numerical enigma of last month is "Song Sparrow."

I think the little folks know the Brown Thrasher so well that they will have little trouble in supplying the missing words in this account of the Brown Thrasher.

The Brown Thrasher(also called -----, brown mocking bird,-----, and mavis, (is ----- inches in length,and has a very long -----. He is reddish ----- above, with darker -----, which have two ----- bands. Beneath he is yellowish ----- with very dark ----- arrow-shaped spots on his ----- and ----- . He is usually found on or near the -----, and he has a habit of twitching and thrashing his ----- when feeding. During ---- and----- you may hear him by the half hour, pouring forth a flood of melody from a -----, head -- and tail -----, but he never sings near his ----- . Thoreau says, "While you are planting seeds he cries, 'drop it, drop it,—cover it up, cover it up, —pull it up, pull it up.' " Wilson Flagg quotes a shoemaker's translation of the song thus: "Look up, look up. Glory to God! Glory to God! Hallelujah! Amen. Videlicet."

The nest of the Thrasher is a rude structure of -----, twigs, ----- and ----- on or near the ground. In this she lays four ----- eggs thickly speckled with -----.

NUTS FOR THE BOYS AND GIRLS TO CRACK.

1. Name five birds which walk.
 2. Name five birds which sing on the wing.
 3. Name five birds which sing in the night.
 4. Name five birds which nest in holes.
 5. Name five birds which nest in bird houses.
 6. Name five birds that repair and use last year's nest.
 7. Name five birds which creep upon the trunks of trees.
 8. Name five birds which have blue plumage.
 9. Name two birds that carry their young as a cat does kittens.
 10. What is a "Merry thought?"
-

THE FAVORITE BIRDS.

"My vote is for the Downy Woodpecker. I have no particular reasons for liking him except that he makes one feel that he has no cares and is free from all vices."—Pierce H. Leavitt, Cambridge, Mass.

"I enjoy the little folks department very much. The bird I like best is the Bluebird. I like it because it comes so early in the spring, and its song is so pretty. I like the colors of the Bluebird too. I have seen some Bluebirds this spring. I like the birds very much."—Helen Tinkham, N. Middleboro, Mass.

"Of all the birds of song, the Meadowlark is my favorite. When one hears his song a feeling steals over him that is indescribable. As the sun is sinking behind the hill and the woods echo with the songs of birds, one can hear in the distance, the sweet notes of the Meadowlark, as he calls his loved mate. He is so happy and cheerful, his song is so sweet, and he must know it for he keeps singing all the long summer day and stays with us from early spring until winter approaches."—Marietta Washburn, Goodwin, S. Dak.

"I like Robin Redbreast best. He is so social, so pretty, so cheerful, has a pleasing song, and is a help to the farmer."

"Among so many charming friends it is hard to choose; I am especially fond of the Wood Thrush. There is something in its song that appeals to me even more than the song of the Veery. There always seems to be a personal element in it and when I meet the bird it seems like meeting a dear friend. The most delightful concert that I ever heard was at twilight, when a score of Woodthrushes made the wooded valley echo and re-echo with their soft flute like notes."

"Here's my vote for the Song Sparrow. He is one of us. He is afraid of nothing, and even in cold and storm he pipes up and says, 'Good, good times are surely coming.'"

"I say, hurrah for the jolly Bobolink, who is bubbling over with fun, and has a rollicking, tinkling, broken up, crushed glass kind of melody."

GLEANINGS.

That if but one of all the birds
Could be my comrade everywhere,
My little brother of the air,
I'd choose the song sparrow, my dear,
Because he'd bless me every year
With "sweet, sweet, sweet, very merry cheer."

DR. VAN DYKE.

JACK MY TAME CROW.

One morning, our Uncle Eb. took us to a wood lot to get as he claimed, something very interesting. At an early hour a small procession might have been seen, wending its way across a field towards some large trees, and carrying a shot gun, a long pole, some grain sacks, a basket, and clothes line. After silently pushing our way through underbrush and fallen tree tops we came to our destination, a tall beech tree which had a crow's nest well toward the top. After tying one end of the clothes line to the pole and the other about his body, Uncle Eb. began to climb a tree near the one with a nest in. When he

got to the top, he pulled up the pole, telling us to be ready to catch the young crows as he was about to push the nest from the tree top. Down came the nest and young crows, but two of them were killed by the fall. The third remained in the nest, falling the fifty feet in safety. Will and I put the live one in the basket and covered it with the grain sack. We then started with our captive for home, Uncle Eb. remaining without success to try a shot at the old birds. When first caught, he was anything but pretty to look at, being mostly mouth, legs, and stubby pinfeathers, but it was not long before his feathers grew out nice, black, and shiny and he learned to fly. The tiresome hours we spent getting him food will never be forgotten. One morning Will took "Jack" on his shoulder and started off to get pollywogs for our pet's dinner. He put Mr. Crow down in a convenient place, but when he was ready to go home Jack was gone. Imagine his surprise when he saw the rogue catching pollys for himself. This was good luck for now we could let Jack get his own dinners. The Robins and Bluebirds used to torment him until he was afraid to go to the orchard alone, and frequently when they chased him he would flee to the house for protection. He was as curious as a Magpie, examining everything that came in his way until he was chased by a dog and nearly caught. For a while after that he stayed in the trees, but soon began his mischievous habits again. He would steal all bright things, hiding them away anywhere. One day when we had forgotten to feed him we found him in the house helping himself from the table. As he got older he would go to the woods and visit the wild crows, but he never failed to come when we called him. We had heard of crows talking so we tried to teach Jack to say his name. When we called "Jack" he would always caw, but with all our trying we never succeeded in teaching him to say any words. Jack came to a very sad end. We were accustomed to giving him a drink of milk every night but one time we forgot him, so he attempted to help himself from the forty gallon milk can. He fell in and when we pulled him out he gasped a few times and died. Uncle Eb. was glad to be rid of the "black nuisance" as he called Jack. That made our loss all the harder to bear, so we shed some tears both of sorrow and indignation and secretly threw chips at our uncle for revenge, and clapped our hands in delight when he heard that the accidental drowning spoiled half a can of milk.

We dug a grave for Jack in the garden under a nice peach tree, and made him a casket of a shoe box, fixing it all nice inside with soft paper and leaves. We next had the funeral and planted choice flowers on his grave. I want to go back to Pennsylvania next summer to see if I can find his grave. Had Jack been as wise as the crow that put pebbles in the pitcher to raise the water high enough to drink from, he might have lived longer.

FRED T. MORISON, Age 11.

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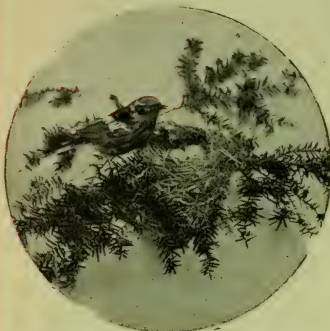
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ADDRESS.....

THE VEERY.

Just as the sun is sinking
Over the western hill,
I wait for a tone that seems all my own,
When the hum of the day is still.
O, exquisite voice of the woodland!
My heart throbs with bliss and with pain
When your sweet notes I hear from the treetops anear,
Echoing again and again.
Hark to the song of the Veery
Here on the edge of the town,
"List to me, list to me, dearie, dearie,"
Just as the sun goes down.

I love well the song of the Thrasher,
Delivered in rollicking style;
I wonder what mirth to his solo gave birth,
'Twould make even an anchorite smile;
And sweetly the voice of the Wood Thrush
Is borne to the listening ear,
O! tenderly, faintly, like joy that is saintly,
Float over the liquid notes clear.
But sweeter the song of the Veery,
Enclosing my sense like a ring,
"Here are we, here are we, dearie, dearie,"
So might a bird spirit sing.

Now die the sweet sounds of the dingle,
All nature is pensive and still,
In the blue deeps, see, a single star peeps,
There's the plaint of a sad Whip-poor-will;
The good nights of the forest are ended,
And the world seems a vast solitude,
But no, for my Veery sings "dearie, dearie,"
From the edge of the darkening wood.
And like tender harp-tones anear me,
Or echoes of heavenly things;
"List to me, list to me, Veery, Veery,"
Soft through the dying day rings.



WILSON'S THRUSH.

Reluctant the feet must turn homeward,
 Could we but in the woodland abide!
 Yet floating along comes the beautiful song,
 In a swelling and cadencing tide,
 Like angels of eventide singing
 Of heavenly blessings and peace;
 O bird of my heart, tho' too soon you depart,
 Yet your song in my soul shall not cease.
 Tho' you leave me my songster, my Veery,
 Your music abides with me aye,
 Your "list to me, list to me, dearie, dearie,"
 To lighten my lonliest day.

BERTHA A. JOSLYN.

WILSON'S THRUSH.

A. O. U. No. 756.

(*Turdus fuscescens*.)

RANGE.

Eastern United States and Southern Canada. Breeds from the middle portions of the U. S. northwards, and is found west to the Plains. Winters chiefly south of our borders.

DESCRIPTION.

Length 7.5 in.; extent, 12 in.; tail, 3 in. Bill above dark brown, below paler like the feet. Eye brown. Upper parts including tail, reddish brown. No distinct ring around the eye as in the Hermit or Olive-backed Thrushes. Under parts white, the breast and sides shaded with buffy and marked with a few small spots of brown. The throat is white shading into the buffy of the breast.

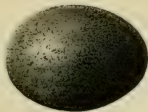
WILLOW THRUSH.

A. O. U. No. 756a.

(*Turdus F. salicicola*.)

This sub-species is the western form of the Wilson's Thrush. It is a somewhat larger and less tawny bird, but the difference is slight and could not be shown by a photograph. The range of the Willow Thrush is given as the Rocky Mountain region of the U. S.

NEST AND EGGS.



The Wilson's Thrush nests abundantly in nearly all low or swampy woodland. The nest is nearly always placed on a small elevation, either a grass tussock, in a clump of weeds, or at the base of a clump of young trees. It is made up of grapevine and leaves chiefly, and is lined with small rootlets. Of course, occasionally nests made of unusual material will be found, but they are always exceptions. Instances have been reported of finding these nests in the holes of trees and placed on branches several feet from the ground but they are rarities. The eggs are laid according to the locality from the middle of May till the middle of June, or if the first clutch has been taken they may nest even later than this. They lay from three to five plain, unspotted, blue eggs.



WILSON THRUSH'S NEST.

HABITS.

Why is it that the Veery or Wilson's Thrush is such a universal favorite? Is it because he has a sweeter song than other birds? I think not, for surely his song can not compare with that of the Goldfinch, Grosbeak, Bobolink or scores of others that I might mention. Is it that he is gifted with greater personal beauty than others of the bird family? Surely not, for he would scarcely be noticed among such

company as the Blue Jay, Scarlet Tanager and others of our noted bird beauties. I think that there is a peculiar magnetism about this bird and its song that attracts everyone. His is a song that is beyond the powers of description or imitation. It is rich, sonorous, and metallic, and above all it is so mysterious; it seems to come from here, there, and everywhere at the same time. Now faint as though the performer were at a great distance, and now it rings out loudly and sweetly as if the bird were at the listeners feet. I remember when I was a boy that I used to liken it to someone whistling the scale through a drain pipe, a sort of spiral song commencing with the high notes and sounding as you might imagine that it would if the bird was being whirled about in a circle by the heels. Nearly every New England woodland seems to be invisibly divided into sections and on each dwells a pair of these Thrushes. They seem always to live at peace with one another as I have never seen a quarrel such as generally occurs when a bird of any other variety trespasses upon his neighbors grounds. The nest of the Wilson's Thrush that is shown here was built in a tangled clump of broken down and dried sweet fern. I was a witness to the operation when the bird was constructing it. Although leaves and grapevine bark were scattered about in great profusion it seemed to require a great deal of study and forethought on the part of the little mother before she could find just what she wanted. With each bit that she brought she would settle down in the growing nest and by twisting herself about in it, shape it with her body so that when completed had a very deep cup shaped interior, so deep in fact that but two of the eggs are in sight in the photograph, although there were four in the nest. I had serious misgivings when first I saw her at work on it for it was near a path and right out in the open without a shrub of any kind to help conceal it. But in a few days it appeared that Mrs. Thrush knew more about such matters than I, for on each side a luxurious growth of ferns appeared completely hiding the nest from inquisitive eyes. Four little Thrushes have just appeared in the nest and I hope to show them to our readers at a later date if a certain black cat that I have seen prowling through the brush near there, does not find them also. I have often wondered whether or not it be unusual shrewdness on the part of these birds when they leave their nest upon your approach. You have probably many times seen birds suddenly appear as if from nowhere, and excitedly scold you from a short distance. Of course you at once know that they have a nest within a very short distance. A Veery will pursue just the opposite course. She will glide off through the underbrush without a sound and will not intentionally by any act of hers indicate that she is anxious about her home. A low metallic whistle is her only signal of distress and it is uttered at some distance from the nest.



OVEN BIRD'S NEST.

"A PRETTY PEDESTRIAN."

Above the sweet melodies of the numerous other songsters that echo through the woods is the "teacher, teacher, teacher," of the Oven Bird. Ere the last notes of his rapidly uttered ditty have died away they are picked up by and repeated by others in distant parts of the woods.

At almost the same instant we notice a slight elevation among the leaves ahead of us. Instinctively we know that it is the little oven of the so-called Golden-crowned Thrush. Walking quietly up from behind, we carefully stoop over and look under the arched roof. Greatly disturbed by this undesirable curiosity, a brownish bird with a spotted white breast hastily dashed out and with many a flirt of her tail objects to our familiarity from a small twig a few feet away.

Within the oven which by the way was an unusually handsome one even for this artistic bird to construct, were five eggs. Remembering the ease with which we had discovered the nest and thinking that others might do the same we decided to photograph it then, although the light was not very bright in the shaded woods. Having exposed one plate on the nest, we moved the camera back and prepared to get one of the bird herself. She had been watching the operation with a great deal of interest but when we had retired to a little distance, she appeared to lose all interest in the nest or its surroundings. Descending to the ground, she started on a tour of the immediate neighborhood of the nest, and during the next few minutes she reminded me of the name that E. T. Seton has aptly given the Oven Bird, "A Pretty Pedestrian." It will be noticed in all her wanderings that the nest is the center of attraction although she appears to pay no attention to it. She gradually drew nearer until finally she was perched upon the arched roof and within the scope of the lens. A sharp click, and one more bird had been photographically shot. Owing to the very insufficient light the resulting negative was quite thin but with intensification, yielded a passable fair print.

It was fortunate that we secured it when we did for two days later not a sign of the nest remained except the hollow where it had rested. Whether its disappearance was due to a two or four footed animal will remain a mystery, as both red squirrels and members of the human family roam about the woods in equal numbers.



OVEN BIRD AND NEST.

Photo from life.

COWBIRD.

A. O. U. No. 495.

(Molothrus ater)

RANGE.

The whole of the United States and southern Canada. South in winter into Mexico.

DESCRIPTION.

Length, 7.5 in.; extent, 13.5 in.; tail, about 3 in.

Adult male. Entire body, above and below, wings and tail, lustrous greenish black with blue and purple reflections. Head and neck all around a smoky brown with few reflections. Bill and feet black. Eyes brown.

Female. A plain grayish bird nearly uniform in color but a trifle lighter below and the feathers have darker shafts, thus giving it the appearance of being streaked. Bill and feet brownish. The young are similar to the female except that the feathers have light edgings, thus giving them a mottled appearance. The female is somewhat smaller than the male.

DWARF COWBIRD.

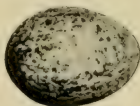
A. O. U. No. 495a.

(Molothrus ater obscurus.)

This variety is identical with the common Cowbird except in the matter of size, it being somewhat smaller. The two varieties spend the winter in Mexico together but when migration time comes the common Cowbird is supposed to come north while the dwarf variety spends the summer in Texas and Arizona. Their habits are precisely alike and the eggs are similar with the exception that the dwarf variety will average smaller.

NEST AND EGGS.

The Cowbird builds no nest of its own but lays single eggs in the nests of other birds generally choosing those that are smaller than itself. Just how many eggs each bird lays is not known but they probably lay four or five in as many nests. Frequently more than one egg of this specie is found in a nest of some other bird. They are probably in this case laid by a number of Cowbirds, as it is generally believed that they will lay but one egg in a single nest.





COWBIRD (Male and Female.)

HABITS.

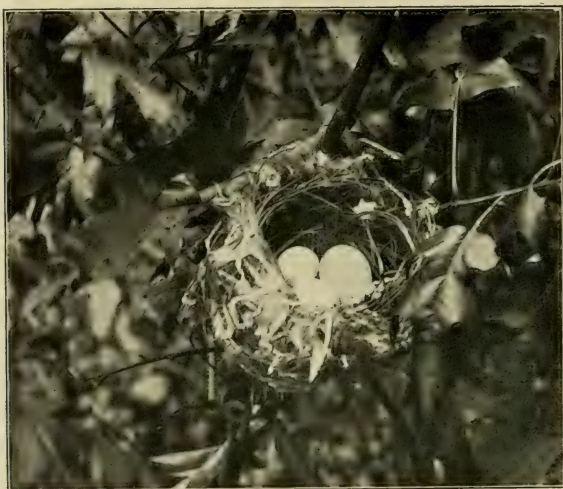
The cowbirds form one of the most interesting groups of birds found in our country. Interesting, not because of any particular value but because of their peculiar and unusual mode of life. They stand alone among American birds as the only ones who construct no nest of their own. They are literally a band of roving freebooters claiming the whole country as their home and having at no time any one place in which their affections are centered.



NEST OF CHESTNUT-SIDED WARBLER
CONTAINING ONE EGG OF THE COWBIRD.

Why this bird, and by the way the male Cowbird is surpassed in beauty by no other blackbird, should select this manner of life is a mystery. If it were not for their nesting habits and the fact that they are polygamus to the last degree, they would find many friends, but their unique habits have brought upon them the condemnation of nearly every man, woman and child in the country. On the ranches in the west Cowbirds are the most numerous. There they literally swarm about the cattle and feed on the grubs that are dislodged by the latter as they feed. It is no uncommon sight to see them perched on the backs of some of these animals, where they will sit for a long time in apparent contentment. In New England they are not so common, yet I rarely spend a day in the woods without meeting with several of them.

They appear to be ashamed of their conduct and are always skulking about the underbrush as if fearing to meet anyone. They display a great deal of cunning in watching their opportunity when the owner of a nest is away when they will sneak up and deposit a surreptitious egg and hastily retire. It does not seem possible that they can do this without the knowledge of the owner of the nest that they employ, and still more improbable does it seem that many of the birds in whose homes we find these superfluous eggs would knowingly submit to their being placed there. I have found these eggs in the nest of the Kingbird, a feathered pugilist, who will allow no other bird in the vicinity



RED-EYED VIREOS NEST WITH COWBIRD'S EGG.

of his own home. It is to be noted that in nearly every instance the Cowbird will choose the nest of a bird smaller than itself on which to thrust its offspring. There are two reasons given for this choice. It may be because they fear the wrath of a larger bird in case they are discovered, or it may be in order that their young will have a better chance of thriving. It is true that their young do always thrive much to the detriment of the legitimate ones. They being larger and stronger get a great deal more than their share of the food that is served.

Warblers, Sparrows, and Vireos suffer to the greatest extent from their visits, and many young of these species are undoubtedly killed yearly because of the Cowbird.



Photo from life by J. E. Sherman.
ROBIN ON NEST.

A BROKEN SERIES.

The photographs from which the illustrations with this were made, I think are equal to if not superior to any that have ever been secured of this bird, the American Robin. The nest is a very attractive one and the location is ideal for an artistic photograph as well as very convenient one for the photographer, Mr. J. E. Sherman of this city. The nest was situated in an elm between fifty and sixty feet from the ground and about six feet from a window of a city block. It was therefore safe from the attacks of the small boy, and even puss would have a hard climb before she reached the nestlings, and Mr. Sherman confidently expected to obtain a series of photos illustrative of their home life. Unfortunately, as is the case with many nests in close proximity to a large city, there are dangers even more grave than those to be anticipated from boys or cats. The nest was completed and occupied by four blue eggs without mishap, but as soon as Madam Robin had settled down to the peaceful occupation of setting, trouble began. The English Sparrows of Worcester are not one whit better than those of other parts of the country, indeed sometimes I think they are even more barborous. Although nesting material was abundant on every hand, out of pure deviltry they chose to steal it from the Robin rather than pick up that which was not already appropriated. One after another would slyly sneak up to the nest, grasp the end of a straw or string, pull it from its fastenings and with a gleeful chuckle fly away with it. These depredations continued unceasingly until the bottom of the nest was torn out and the eggs rolled to the paving below. This is but one instance among the thousands of like occurances that take place in every large city each year, and yet many will undertake to defend the English Sparrow.

The only argument that can be advanced against their extermination is that they serve to enliven the long days of winter when other birds are absent. Those who make this plea never stop to consider why the other winter birds do not stay about the cities. Given a free field with no rowdies to contend and in any locality in which English Sparrows could thrive during the winter, would be found numbers of Chickadees, Nuthatches, and Woodpeckers. When the legislatures of each state can be induced to offer a bounty on the heads of the House Sparrow, then, and only then can there be hope of peace and happiness in the city bird population. May the day soon come.

Identification Chart No. 6.



A. O. U. No. 75, Sooty Tern, (*Sterna fuliginosa*.)

A tropical species found in North America along the Gulf coast and south Atlantic. Length about 16.5 in. Back, sooty black. Bill and feet black. Iris red. Very common.



A. O. U. No. 77, Black Tern, (*Hydrochelidon nigra surinamensis*.)

Length about 9.25 in. Found in abundance throughout North America, both along the coast and in the interior. Breeds from the middle U. S. northwards. Head, neck and under parts, black. Back, wings and tail, lead gray. Under tail coverts, white. In winter: Forehead, sides of head, neck and under parts, white. Back and tail, grayish. Eggs laid on broken weeds and debris often on a floating mass.



A. O. U. No. 79, Noddy, (*Anous stolidus*).

Length, 16 in. A tropical bird found in North America, along the Gulf Coast and the South Atlantic. Bill and feet, blackish. The entire body is of a dark brownish color, shading through a blue gray on the back of head to white on the forehead and chin. The tail is long and very much rounded. They breed by thousands along the Gulf coast placing the bulky nests of sticks in the mangroves and other bushes.



A. O. U. No. 80, Black Skimmer, (*Rynchops nigra*).

Length about 18 in. This is strictly a coast bird and is found in large numbers on the South Atlantic and Gulf coasts. Mandibles long and very thin, the lower mandible being about 3 inches in length. Basal half of bill, red, the remainder being black. Feet, carmine. Forehead, entire under parts and tail, white. Secondaries broadly tipped with white. Top of head, wings and back, glossy black. Nests in large colonies, the eggs being laid on the bare sand.

A. O. U. No. 69, Foster's Tern, (*Sterna fosteri*).

Length, 15 in. Found throughout North America and breeds through the United States and southern Canada. Bill and feet, orange red, the former having the terminal half black. Back and wings, light pearl gray. The under parts and tail, white. The outer primaries are the same color as the back. Tail longer and more deeply forked than the others of this group. In winter the bill and feet become dusky and the black cap on the fore part of the head becomes mottled with white.

A. O. U. No. 70, Common Tern, (*Sterna hirundo*).

Length, 14.5 in. Found in North America chiefly east of the Plains. Breeds from the Arctic coast to the Gulf States. Upper parts of a pearl gray, a shade darker than that of Foster's. Under parts a still lighter pearl gray, changing to white on the throat and under coverts. Outer web of the first primary is black, the remaining outer ones are grayish black with a silvery hoariness. The outer web of the outer tail feather is also dark. Bill and feet, coral red, the former with the terminal half black.

A. O. U. No. 71, Arctic Tern, (*Sterna parasaea*).

Length about 15 in. Breeds from Massachusetts to the Arctic circle and winters from Virginia and California northwards. Bill and feet entirely lake red. Feet are very small, the tarsus being much shorter than that of the proceeding. Outer web of first primary, black, the remaining ones being silvery. Upper and under parts pearly gray, the latter being of a lighter shade. In winter they show the usual white on the crown and forehead.

A. O. U. No. 72, Roseate Tern, (*Sterna dougalli*).

Length, 14.5 in. Found on the Atlantic coast from Massachusetts southwards. The greater part of the bill is black, it being red only at base. Feet, bright red. Neck and entire under parts snowy white, tinted with a delicate rosy blush. Upper parts a pale pearly gray. Outer web of outer primary black, the others silver. In winter the bill is black and the feet dull. The rosy tint is wanting and the black cap has changed to white on the forehead.





Photo from life by J. E. Sherman.
ROBIN ON NEST.

HUDSONIAN GODWIT.

A. O. U. No. 251.

(*Limosa haemastica.*)

RANGE.

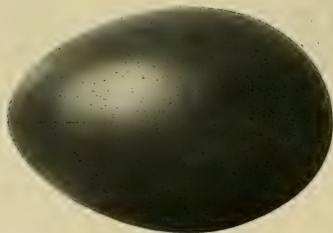
Entire North America, including Alaska, east of the Rocky Mountains. Breeds in the extreme north and winters south of the United States.

DESCRIPTION.

Length, 16 in.; extent, 26 in.; tail, 3 in. Bill and feet, light gray, except the terminal third of the former which is black. Eye brown.

Adult in summer. Back wings, and tail black, the feathers of the back and wings having buffy white spots on the outer edges. The rump and bases of the black tail feathers are white, this occupying about two-thirds of the outer tail feather and decreasing on each consecutive one until the middle feather has barely a trace of white at its base. The tail feathers are also narrowly terminated with white. The whole head and back of neck are grayish white streaked with black. The under parts are a rich, reddish chestnut, barred with black, this barring being heaviest on the sides and flanks. This chestnut color extends up on the throat and neck in front to the chin, which is white, finely streaked with grayish. The under tail coverts are white or buffy and are broadly banded with black. The primaries are black with white quills and the secondaries are grayish or grayish brown, the feathers being darkest in the centers. In winter. General color all over is a grayish, this being rather darker and a grayish brown on the back. The wings and tail are the same as in summer. They have no distinct reddish coloration. The young are similar to the winter birds.

NEST AND EGGS.



This species breeds quite abundantly on the Barren Lands of the Arctic Ocean. Like most of the other varieties of Plover, their nest is merely a depression in the earth and is lined with a few grasses.



HUDSONIAN GODWIT.

The eggs are laid during June and are four in number, of a dark olive brown color and are blotched with darker brown. Very frequently the ground color is so dark as to obscure the markings of the eggs.

HABITS

The Hudsonian Godwit, Ring-tail Marlin, or American Black-tail Godwit appears to be about evenly distributed over the country except that portion west of the Rocky Mountains. It associates frequently with the Marbled Godwit, but can always be told from the latter by its smaller size. Godwits are much esteemed as table birds and are continually sought by gunners. They are very shy and when alarmed will fly at a great altitude. Their flight is strong but not unusually rapid. On alighting they will nearly always elevate their wings above the back just before touching the ground, and then carefully fold them in place. They may be decoyed at times by an imitation of the call which is a guttural two syllabled whistle. Wooden decoys also sometimes cause them to descend to investigate. When necessity compels they can run remarkably fast although their usual walk is very stately and dignified. They are usually found in small flocks either composed only of their own kind or they may be with other birds of the same family. They frequent the muddy banks of inlets, rivers, ponds and marshes from which they get their supply of food. This consists mainly of minute shell fish, worms and aquatic insects. They get these by probing in the soft mud with their long bill. Frequently they will feed in water of such a depth that they are obliged to immerse their whole head and neck in order to reach the food they seek. They rarely swim however unless necessity forces them to save their lives. The little downy covered young take after their parents in athletic ability for they are remarkably adept at running and hiding in the grass. During their migrations they fly chiefly at night and in flocks of forty or fifty individuals.

TOWHEE.

A. O. U. No. 587

(*Pipilo erythrophthalmus*.)

RANGE.

The United States and southern Canada east of the Plains. Breeding throughout its range and wintering in the southern half of the United States.

DESCRIPTION.

Length, 8 in.; extent, 11.5 in.; tail, 3.5 inches. Bill, black. Feet, brown. Eye, red. Adult male. Head, neck, breast, back, wings and



TOWHEE.

tail, black. A white band across the primaries formed by white patches on the outer webs. White spots on the outer webs of the inner secondaries. Outer web of the outer tail feather and about half of the inner web, white. The next two or three feathers with gradually decreasing spots of white. Belly white and sides chestnut. The under tail coverts are pale brownish. Female. Similar to the male except that the black of the latter has been replaced with brown. The young birds and the adults in winter have white irides.

WHITE-EYED TOWHEE.

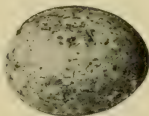
A. O. U. No. 587a.

(P e allent.)

Very similar to the northern Towhee. Less white on the wings and tail and the eye is always white. Also averages a trifle smaller. A resident of Florida and found on the south Atlantic coast to South Carolina.

NEST AND EGGS.

The Towhee nearly always builds its nest on the ground, placing it under the shade of some bush. It is made of leaves, grasses, bark, and lined with fine rootlets. Occasionally a nest of this species will be found placed in a bush, but in this case it is due to some eccentricity of the bird and is a rare occurrence. Side hills and valleys covered with a small growth of trees seem to be the most favored localities in which to find their nests. Their set is completed the latter part of May and consists of three or four white eggs with a pinkish tint. These are very finely speckled over the whole surface with reddish brown and lilac.



HABITS.

Towhee, Chewink, or Ground Robin are the names generally applied to this bunting. The first two names are the ones chosen by himself as he frequently repeats them, while the latter one is given because of the Robin color on his sides and because he is a ground bird.

These are one of the most common most inquisitive and noisiest of our birds throughout the summer. As long as you are in the wooded section they will follow you about, now scolding and now treating you to their peculiar but pleasing song. It has always seemed to me that their note sounds a great deal more like "Cherink" than the "Chewink"

by which they are called. They are very industrious birds and when not either singing, scolding or engaged in the incubating of their eggs they are sure to be heard scratching away in the leaves as though their lives depended on the speed with which they could turn them over.

They dislike very much to be disturbed when they are busy and upon catching sight of you will hop up to the farther side of a bush and excitedly chirp and "Cherink" at you. If you remain quiet they will gradually come nearer and nearer until at last you may catch a glimpse of a



Photo by C. A. Reed.

NEST OF TOWHEE.

pair of bright red eyes peeping out from between the leaves. If you do not move he will soon get over his anger and will mount to the top of a bush or small tree and pour forth a series of "Hip-to-hee's, interspersed frequently with the other rendition of his name.

The female is very tame while sitting upon the nest. She has a firm belief that owing to the dried leaf color of her plumage she is invisible, and no doubt their nests are much less often found than would be the case if they left it every time anyone came within sight. When you get so near that she is afraid to remain on the nest any longer she will quietly glide out the back way where she will be protected from view by the bush under which their nests are nearly always placed.

Towhees are very quick actioned birds and they have a habit when flying through the brush of flirting their tail and spreading it at the same time so that the white tail feathers always attract attention as they disappear and will serve to identify them.

HOW BIRDS BATHE.

Near the north door in plain sight of two windows, I keep a large, shallow pan filled with water for the chickens. It was not long before I found out that the birds came here frequently to bathe and drink.

A pair of Catbirds came often and were the boldest of all my feathered visitors. Madam Catbird would fly gracefully down to the pan, tip her head from side to side, take a sip, then another; then step lightly in and splash till every feather was dripping. If the water was mostly gone or she spied the cat, she would say "quit, quit," with a whispering sound, and if very much disturbed would cry "Ka-a-ah, ka-a-ah" in such a harsh, discordant tone that you would never expect to hear that sweet melodious song so much like the Brown Thrashers from her mate. And he can scold as well as she for I've heard him. Matronly Robin Redbreast was more cautious than the Catbird, and would fly down to the ground near the pan, run the rest of the way, step on the edge of the pan, drink, hop off, run around to the other side and in fact inspect it from all sides before she would risk getting in. One day she had been more deliberate than usual with her inspection, and had just nicely begun to bathe when Mr. Robin came for a bath. He wanted to begin at once, but she wanted to finish her bath first and drove him away several times. I looked for a family quarrel, and was sorry to see her get so angry, when all at once she seemed to change her mind, and stepped to one side of the pan, and they finished their bath together. My! How the water flew. I did not wonder then that the pan needed filling so often. I had to be very careful to keep out of the way when Mrs. Song Sparrow came. Her home was in the garden some distance away, and I suppose she did not feel as much acquainted as the others did. If she did not see me she would run to the pan, get in and flutter about until she was as wet as could be. One day mother and I were

walking quietly along by the rose bushes when we heard an angry little chip. Looking closely we saw Mrs. Sparrow fly to the peach tree. At first we wondered what made her so angry for we were not near her nest. Then I noticed how wet she was. It seems that we had interrupted My Lady at her bath and she was telling us how rude we were. I wanted to see if she would come back, so we went on a little farther and kept quiet. In a few minutes she did come back and finished her bath in peace. Hark! Oh that is a Kingbird. He is perched on a wire that is stretched about ten or twelve feet above the ground, between the maple and the wild cherry. If you watch closely you will see that he is continually folding and unfolding his wings, turning his head from side to side and at the same time keeping up a continual chirping in a very noisy and restless manner. Watch, for he means to take a bath in that pan. He looks down and with a graceful swoop flies down to the pan, through the water, out at the other side, and with the same graceful curve rises until he can alight on the shed roof or maple. He never alights on the pan except to drink, but repeatedly flies through the water until he is as wet as the other birds are with all their splashing. I never tired of watching him, his ways were so different from the others. In the latter part of the summer I was out one morning when a heavy dew had fallen, and noticed a pair of birds flying so close to the tips of the branches of the dew laden trees that the tiny drops fell off in showers. Beautiful birds they were, but I do not know their names, although I have watched them nearly all summer.

MAUDE L. MILLER.

A NOTE ON THE NIGHT HAWK.

While looking for a nest of the Night Hawk one bright sunny morning, I was suddenly startled by a bellowing noise directly overhead. Jumping to one side and glancing up, I beheld a male bird rising in the air. I stood where I was watching the bird fly about, uttering his rasping-like call; after getting well up in the air, he suddenly paused and came soaring toward me like an arrow. About fifty feet in front of me his wings were lowered below his body, throwing them forward with the flight feathers spread wide apart. After travelling this way for ten feet or more, the bellowing-like noise to be heard. He would then rise to repeat the performance. His speed was so great that the flight feathers vibrated like a large loosely stretched rubber band when snapped with the fingers. This performance was repeated in front, back and beside me twelve times in all, never more than fifty feet away, and as near as fifteen. In all cases the wings were in the same position, and his mouth never open.

As there is some dispute in regard to when, where, and how the Night Hawk makes this noise, I offer this as a possible solution.

J. B. CANFIELD, Bridgeport, Conn.



DEAR BOYS AND GIRLS:

Now School is out and the long vacation begun; those of you who are so fortunate as to spend it in green country fields, on mountain slopes, or by the great waters, will no doubt have a jolly time getting better acquainted with Dame Nature, who "with a smile on her face, and a sprig in her cap calls you to feast from her bountiful lap." And what a feast she sets before us, a menu of many courses, from birds, trees, flowers, ferns, and insects, to frogs, lizards, and snakes; each one can find something to suit his taste. There will be some rainy days so the pages of the AMERICAN ORNITHOLOGY will not remain uncut, and we hope you will write to us of your good times with your neighbors in feathers.

We print part of a letter from one of our readers in New Hampshire, who evidently makes good use of his eyes and ears. We also give you another numerical enigma sent by a friend over the Canada line.

You will notice that we have added a Roll of Honor, where there will appear each month the names of the boys and girls who send correct answers to the puzzles and questions. Now we must say good bye for another month.

MEG MERRYTHOUGHT.

EXETER, N. H., May 2, 1902.

DEAR MEG MERRYTHOUGHT:

I got my May number of the A. O. this afternoon, I think it is a good paper and the pictures are fine. Enclosed please find answer to the numerical enigma. I think it was quite a hard one, it took me an hour to get it out. I could get what the beggars wore, but the rest of it I couldn't make out. So I tried to find a common bird with eleven letters in its name, after awhile I got Song Sparrow. This is a very early year for birds, I have seen quite a number of them. I saw a

belated Robin two days after Christmas. I heard and saw what I was quite sure was a Cuckoo on the 20th of March. I was quite a ways off so I couldn't tell, but it was going cu cu cuk, cu cu cuk, just the way I have always heard them. Heard a Hermit Thrush on the 22nd of April. I think their song is beautiful; it sounds like a flute, yet it tinkles like a bell. I saw a Brown Thrasher on the 27th of April and I crept up within ten feet of it before it flew. I saw some Blackbirds on March 18th and a Purple Finch and Red-winged Blackbird on April 17th.

I never saw the Bluebirds so plentiful around here as they have been this year. I am not sure but the other morning I thought I heard an Ovenbird. Last year I knew where an Ovenbird had her nest. It was a little dome shaped structure made of pine needles and oak leaves, laying flat on the ground in some underbrush. You wouldn't see it unless you knew where it was, and you had to go by some trees that it was near. There were two eggs in it. Whenever I approached she would run along the ground, like a Ruffed Grouse, trying to head you from her young ones, with her wings trailing and uttering a distressed cry, and walking as awkwardly as she could. When I got to the nest she would fly back and light on some brush near by and scold me. One time a Ruffed Grouse fooled me; I was out with one of my neighbors, Constance Fuller, picking lady slippers, when I heard the funniest noise, at first I thought it was a boy getting a whipping and I ran to see, and there was a Ruffed Grouse running along the ground. I ran after it; I thought it couldn't fly, when all of a sudden I heard Constance holler to me to come quick and see some baby Ruffed Grouse. I ran back but when I got there all had disappeared but one, and that one was just crawling under some leaves. I lifted him out and took him home to show. He looked just like a little chicken. The feathers were of a light brownish yellow and very downy. I had his picture taken and then took him back. That was a pretty good puzzle in your paper last month; I guessed all but that turkey.

Yours truly,

STAFFORD FRANCIS.

Answers to Puzzles in June number: Missing words in account of Brown Thrasher. 1, Brown Thrush; 2, Election Bird; 3, Eleven; 4, Tail; 5, Brown; 6, Wings; 7, Whitish; 8, White; 9, Brown; 10, Breast; 11, Sides; 12, Ground; 13, Tail; 14, May; 15, June; 16, Treetop; 17, Up; 18, Drooping; 19, Nest; 20, Bark; 21, Grasses; 22, Roots; 21, Green; 24, Brown.

Answers for Nuts to Crack:

1. Cowbird, Ovenbird, Meadowlark, Titlark, Partridge.
2. Bobolink, Bluebird, Goldfinch, Indigo Bunting, Purple Finch.

3. Chat, Vesper, Sparrow, Carolina Wren, Rose-breasted Grosbeak, Mocking bird.
4. Woodpeckers, Bluebirds, Swallows, Great-crested Flycatcher, Wren.
5. Martins, Bluebirds, Wrens, Sparrows, White-bellied Swallows.
6. Owls, Eagles, Fish Hawks, Bluebirds, Great-crested Flycatchers.
7. Brown Creepers, Black and White Warblers, White and Red-breasted Nuthatches, Woodpeckers.
8. Bluebird, Indigo Bunting, Kingfisher, Blue Jay, Black-throated Blue Warbler.
9. Whip-poor-will, Wood Duck.
10. A Merrythought is the forked bone of a fowls breast, often called a wishbone.

ROLL OF HONOR.

Leroy S. Noble, William U. Elliott, Stanley Drake, Stafford Francis.

WHAT WERE THEIR NAMES.

Willie Parmelee was lost. You would suppose that a boy who had just had a birthday, and was five years old would know better, but to tell the truth, he had run away. His mother told him not to go outside the yard, but an organ grinder with just the cutest little monkey went up the street, and what small boy could resist following just a little way to see the queer antics of the little fellow in the cap and scarlet coat. Then, before he was fairly started for home again he heard a clear whistle which seemed to say to him, "look up, way up, look at me, Willie!" He looked up and there in the maple boughs sat another scarlet coated fellow, not a wizened faced monkey this time but a gay ----- with bright coat and black wings. Will's sister had often read the AMERICAN ORNITHOLOGY to him; wouldn't she be pleased when he told her about this beautiful bird; so as the ----- flew away towards the woods, the small boy trudged along after him, through bushes and briers, over stones and fallen logs, for another glimpse. Out of breath, he soon sat down under an old chestnut tree. His little friend in scarlet had disappeared, but here were other birds all about him. He would use eyes and ears and learn what they were. A pair of jaunty little fellows with black velvety caps above gray and white coats, hopped fearlessly about from limb to limb. "Who are you?" whispered the boy softly, quick as a flash came back the reply, ----- . A tiny olive brown bird with breast of yellowish white sat near by on a dead branch, and jerking head and tail, with great emphasis, clearly told him over and over that its name was

-----; over yonder its larger cousin in a plaintive tone called -----, and a still larger cousin informed him between sallies into the air after passing insects that it was a ----- . Other birds came about and in a most confiding manner gave their names in clear tones to the little chap sitting so quietly on the green moss.

A black bird with white feathers in its wings and tail, with chestnut colored sides and white beneath, ceased scratching among the leaves and answered ----- then flew to a high limb and laughed "Ho, he-he-he;" even the large blue and white bird which flew from the big pine, said in harsh tones that he was a ---- . Here were some brown mottled birds slipping about among the leaves, could it be that grandpa's chickens had strayed so far from home; no, this was denied at once by one of the flock who mounted a fence and whistled his name ----- .

From far over the meadows tinkled the bubbling notes of a black bird with white and yellow on back and wings. He seemed to say "I, am a ----- .

He caught a glimpse of a long-billed drummer with a crescent on its yellowish breast and a large patch of white on its lower back, who gave his name in nasal tones, ----- . An iridescent dove-like bird in soft greyish brown with long tail tipped with white and a white breast slipped quietly past him, but from a tree not far distant answered the roll call with "----- ." Suddenly an olive green ---- with yellow breast and white line over the eye darted through the thicket, and with twitching, jerking motions seemed to say to the little lad, "Tut-tut, what's this, why, why, ho, who, who are you, cluck, tut, boy go home."

A white-eyed ----- peered out at him and cried, "I say, who are you, eh?" Well, that was but fair after so many of the feathered folks had told him their names, so politely bowing he replied "William Theron Parmelee." A voice from the woods startled him, it plainly said, "Whip-poor-will! Whip-poor-will!" How did that bird know he ran away? A ----- swooped through the air for its supper and called "beef, pork," and all at once Willie realized that he was tired and hungry, darkness was closing about him, and home was a long way off. His shoes were coated with mud, his clothes torn, and his hands and face scratched. Which way should he turn? Hark! What was that? It was but a Wood ----- serenely caroling its vespers, but it sounded like mothers voice, "Come to me." Will hurried through the undergrowth towards the songster, and hurrah, here was the grassy cart path which led directly to the meadows back of neighbor Clarks barn. He reached home just as his sister was starting out

to look for him. After he had eaten his supper he told his sister how the birds had talked to him and told their names, and asked her to write them down for him to send to Meg Merrythought for her boys and girls. She did so, and that is the reason I have given you this story of lost Willie.

NUMERICAL ENIGMA.

I am composed of 9 letters. My 8-2-5-3-9-4 is a place for keeping odds and ends. My 1-6-3-2-4-9 is a danger of the seas in olden times. My 4-3-6-1 is what everyone ought to take sometime during the year. My 1-3-6-7-9 is that which no one should have too much of. My 8-5-6-4 is what everyone should have, and my 1-6-8 is what nobody likes to be thought (or an animal.) My 8-2-5-4-9-3 is what every proper young lady blushes to mention. My 1-9-5-4 is an adjective sometimes applied to school girls. My 1-6-9 is something a boy always wishes more of, and my whole is a bird whose greatest enemy is a gun

Mrs. F. H. LINGWOOD, Kingston, Ont.

QUOTATIONS.

THE REDBREAST.

Bearing the cross while Christ passed forth forlorn
His Godlike forehead by the mock crown torn,
A little bird took from that crown one thorn
To soothe the dear Redeemers throbbing head.
Thus helping what she could: The blood, 'tis said,
Down dripping, dyed her tender bosom red.
Since then no wanton boy disturbs her nest,
Weasel nor wild cat will her young molest,
All, sacred deem the bird of ruddy breast.

(A Breton Legend.)



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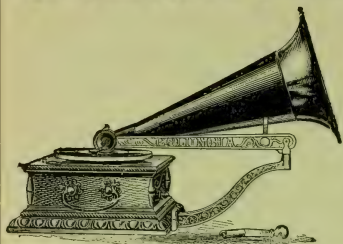
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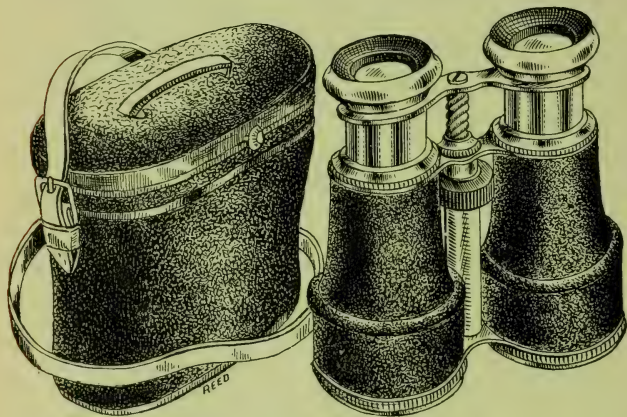
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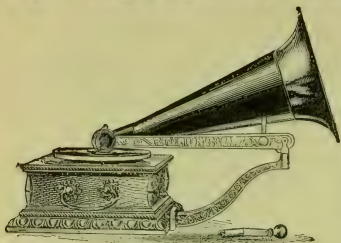
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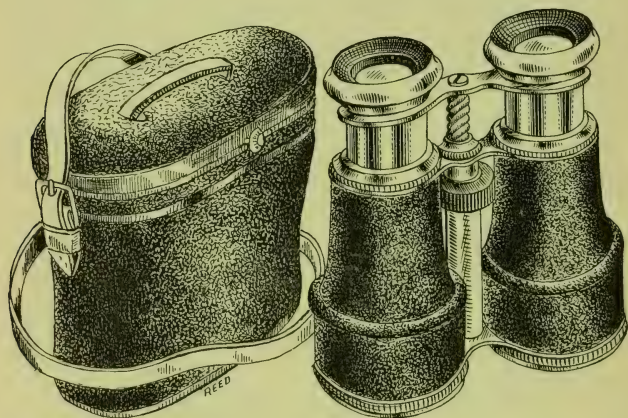
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CHAS. K. REED

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WORCESTER, MASS.

THE ORIOLE'S NEST.

Just over the road, where the world may see,
A swinging nest hangs from a locust tree.
The branch droops, a frail one, with leaf and flower,
A fragrant place, truly, for birdies' bower.
The white blossoms flutter, the cradle swings;
The oriole mother's sweet love-call rings
As, flying she darts in her open door
And nestles, at dusk, by her treasures four.

All carefully built in a hairy ball,
Gray-painted, soft lined, with a close knit wall,
The oriole nest is a work of art,
A thought of the Master's own tender heart.
The black and gold wings flicker bright about,
And ever the clear, liquid notes pipe out
As true to their lesson, the whole bird clan
Gives praise, working aye to their Maker's plan.

Oh, rough winds, when tempest-tossed trees bend low,
When gloomy clouds gather and wild storms blow,
Brush not in your swift flight this swaying nest
Where timid birds huddle to mother's breast!
Oh, hands rude and thoughtless, for this nest wait,
Until, with a satisfied song, each mate
And fluttering birdlings fly forth to seek
Another fair haven for breast and beak!

HARRIET L. GROVE, Delaware, Ohio.



LOUISIANA WATER-THRUSH.

LOUISIANA WATER THRUSH.

A. O. U. No. 676.

(Selurus motacilla.)

RANGE.

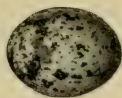
Eastern United States, north to southern New England and Michigan and east of the plains. Breeds from the Gulf States northwards and winters in the West Indies, Mexico and Central America.

DESCRIPTION.

Length, over 6 inches; extent, 10.5 inches; tail, 2.5 inches; Bill and eye dark brown; the lower mandible being rather lighter than the upper. Feet pale brown. Upper parts, including the wings and tail, which are unmarked, are a dark olive brown. Under parts white and except the throat and belly streaked with olive brown. This bird is quite similar to the common Water Thrush except that it is larger, the streaks are less numerous and the throat of the common variety is also finely streaked or spotted. The bill is also noticeably larger in the Louisiana variety.

NEST AND EGGS.

The nest of the Louisiana Water Thrush is made of leaves and grasses and generally situated under the edge of an overhanging bank or the roots of a tree. They lay from four to six white eggs these being spotted and specked with reddish brown more conspicuously in the form of a wreath around the larger end, although the entire surface may be sprinkled with them.



HABITS

Any of our New England brooks flowing through a fair size open piece of timber, will be a great inducement for one or two pair of Louisiana Water Thrushes to use the banks or roots of overturned trees along its course as their summer residence.

This bird is of a retiring disposition, yet not averse to making its presence known but not often seen, and arrives in this locality about the middle of April. The male arrives first, but is soon followed by the female. At this time it will be seen feeding along the banks of the stream, flying just ahead of you, and when on the ground, bobbing its body up and down resembling in many ways the Tipup or Spotted Sandpiper. When suddenly disturbed while feeding, it will utter a

scolding chip and fly into a bush ahead of you, scolding at you as long as you are near their chosen haunts. Later when the nest is completed and the female is setting, the male will perch on the top of a tree and sing as though he were trying to burst his throat, not near the nest, but within hearing distance of the female on it.



Photo by J. B. Canfield.

NEST AND EGGS OF LA. WATER-THRUSH.

The last week of April or the first day of May the birds begin the mating, and the woods then seem alive with them, as it is evident that the male who can sing the loudest or longest, is chosen by the female. Their love-making over, their first duty is the finding of a nesting site, which, as in most cases of this kind, seems a most vexing problem. Here is an upturned tree with a nice hollow in the dirt at the roots where some of it has fallen out or where a stone once rested; close beside the stream there is a bank with the sod hanging over forming a roof; just beyond this is a bank sparingly covered with grasses and ferns hanging down; under the ferns is a nice hollow that with a little work may be suitable.

We will suppose they have selected the hollow in the root, after much chirping and many examinations. It may need some slight alterations, such as removing the loose dirt or enlarging; this being finished



Photo by J. B. Canfield.

NEST OF LA. WATER-THRUSH SHOWING SITUATION.

both birds will fly up and down the stream until they have found some dead leaves resting in a little surface water, and often partially covered with mud. A leaf will be picked up here and there and carefully examined, and if to their liking, will be taken to the site and laid down. The birds seem to select wet leaves, as they are not so apt to be blown away or misplaced. This operation will be gone through with until a large number of leaves have been placed in the cavity. The conformity of the hollow has been followed, and on the bed of leaves the nest proper is placed, made of grasses, skeleton leaves, etc. The lining is made of skeleton leaves, fine grasses, hair-like roots and horse hair. One or two days elapse before the female begins to lay, then laying one egg every day until the set is completed, five being the usual number but often six. Incubation then begins and is continued twelve or fourteen days, depending on the weather. The female does most of the incubating, for I have never seen a male on the nest. She is a very close setter, often allowing you to almost touch her before leaving the nest, then sliding off like a mouse, stopping a few feet away chirping and scolding at you with great vehemence, and watching to see that you do not get too near.

The young birds when hatched are brooded for a few hours before being fed. Both birds are ardent providers, and the young grow rapidly leaving the nest in a week or ten days. After the young have left the nest, the old birds will often build and raise another brood, if the season is favorable. If robbed of their eggs they will lay a second and even a third set, returning year after year to the same locality.

J. B. CANFIELD, Bridgeport, Conn.



Photo from life by C. A. Reed.

FIELD SPARROW.

FIELD SPARROW.

A. O. U. No. 563.

(Spizella pusilla.)

RANGE.

The United States and southern California east of the Plains. Winters along the Gulf Coast and breeds from middle United States northwards.

DESCRIPTION.

Length, 5.5 inches; extent, 8 inches; tail, 2.5 inches. Eye brown. Bill pale reddish and feet pale brown. Crown dull chestnut, sometimes showing traces of a median stripe. Ear coverts and postocular stripe also pale chestnut. Under parts white washed with pale brown on the breast and sides. Back rusty brown narrowly streaked with blackish. Two more or less distinct wing bars formed by the grayish tips to the middle and greater wing coverts. Rump and tail brown, the latter rather darker than the former and having the feathers edged with grayish.

WESTERN FIELD SPARROW.

No. 563a.

(S. p. arenacea.)

Very similar to the eastern variety but having a longer tail and broad gray median stripe on the crown. Found in the Great Plains from Texas to the Dakotas.

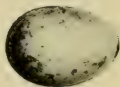
WORTHEN'S SPARROW.

No. 564.

(Spizella wortheni.)

Like the Western Field Sparrow except that the tail is shorter, the wing bars much paler, and the postocular stripe lacking. Locality, New Mexico.

NEST AND EGGS.



These three varieties of the Field Sparrow nest equally often on the ground or in small bushes. The nest is made of fine grasses and roots and nearly always lined with horse hair. They lay from three to five delicate bluish white eggs which are speckled over the entire surface, but more particularly about the larger end with lilac and reddish brown. About the latter part of May, nests containing full sets of eggs may be found. Very frequently two broods of young are raised in one season.

The accompanying photograph by Mr. Embury illustrates a very typical nest located on the ground.

HABITS.

As their name implies, Field Sparrows are inhabitants entirely of fields, not those that are carpeted with fresh green grass, but rather high and dry ones, dotted here and there with low bushes or shrubbery.



Photo from life by C. A. Reed.

JUST AFTER FEEDING.

Throughout the East the high pitched piping melody that constitutes their song is one of the most familiar sounds of rural life. Beginning with a single drawn out whistle of a varying intermediate pitch, it continues through a succession of three or four high keyed ones into a pleasing trill. It is a little song that once heard and identified will not likely be forgotten or confused with that of any other bird.

I have lately seen their song compared to that of the Prairie Warbler. Both of these birds breed in the same fields about Worcester and I have never seen resemblance enough to warrant considering them together. One is the clear flute-like whistle of the Sparrow, while the other is composed of the peculiar, hesitating, squeaky notes common to many of the warblers. Both birds share equally the task of constructing their nest and in feeding the young. Both are equally emphatic in their objections when the home is threatened. Like all other species of birds different individuals show great differences in their temperaments. If you approach the nest of one pair they may

perch on the top of some bush and keep up a regular and energetic chirping until you have left the neighborhood; another may be more confiding and if you remain quiet even near the nest, return to take up the household duties at the point where you interrupted them. I was fortunate in finding a nest of a bird of the latter nature. The nest, or what later was to be the nest, was discovered almost with the laying of the first straw. During the two hours following, observations were continued and in this time the nest grew wonderfully. She was the carpenter, Mr. Sparrow's part in the work being to gather his share of the material. Both birds would depart together, but she invariably returned first and had her grass carefully and mathematically deposited before he arrived.



From life by C. A. Reed.

CLEANING THE NEST.

In the course of three weeks, three of the four eggs that she had laid in the completed nest were hatched. When the young were six days old the photographs shown with this were taken. The camera was first placed about four feet from the nest, but was later moved to with-



Photo by C. A. Reed.

YOUNG FIELD SPARROW.

(Two days after leaving nest.)

in three feet. Although it was not concealed in the least, the Sparrows paid not the slightest attention to it and after I had been there a half hour returned freely to feed the young even when I was seated beside the camera and within four feet of them. Ants, spiders and plant lice seem to be the food most frequently brought, and small caterpillars also supplied a good portion of the bill of fare. Frequently when either bird returned with a load of provisions they would also have a number of small pieces of dried grass in their bills. I could not make out why this happened, but it looked as though in catching the insects



YOUNG FIELD SPARROW.

they also frequently got pieces of grass with them and did not bother to separate the two. On the twelfth day after the eggs had hatched, I again visited the nest and found it empty. The adult birds were present and considerably excited, so I was certain that the young were close by. By carefully watching, two of the little ones were found and captured. The camera was now carefully focussed on a branch and we were ready to take their pictures. They were not ready however, and for the next half hour we had a very busy session. Both adult birds were all the time fluttering about in the grass at our feet and calling for their little ones to fly from the branch whenever we placed them upon it. They were very obedient children and promptly minded their parents. Sometimes they would fly off, sometimes hop off and again fall off, but get off the branch they would and did, and as they had had a day's practice they could make quite extended flights. We did finally succeed in inducing them to pose for a fractional part of a second and the results were satisfactory to all parties as we had the pictures and they had their liberty.



Photo by Geo. C. Embody.

NEST OF FIELD SPARROW.

A BIRD-LAND TRAGEDY.



NE beautiful Sunday afternoon in the month of March, 1900, I was sitting with a friend on the piazza of his home in the state of Florida. The day was an ideally perfect one, the lower south springtide was at its flood, and earth and air seemed vocal with rejoicing. In a close by date-palm a Mockingbird was industriously constructing her nest, serenely oblivious to the command: "Six days shalt thou labor and do all thy work," while from the topmost twig of a live oak tree her mate poured forth his soul in the

rhapsody of an impassioned love song; the Martins twittered and scolded from every window of their house, while a gorgeous Redbird, like a living flame, slipped in and out of the plummy depths of a clump of bamboo to the accompaniment of his clear, flute-like whistles; and everywhere the Blue Jays were living up to their well deserved reputation for noisiness and "as a disturber of the general peace."

In the top of a tall black jack oak growing on the lower edge of a small field lying directly opposite the piazza on which we were sitting, two Jays in particular were strenuously endeavoring to outdo each other in clamor. Suddenly a dark streak cut athwart our line of vision and disappeared like a flash into the top of the oak, to almost instantly reappear and make off into the nearby hammock growth, and at the same time one of the Jays filled the air with cries of terror and pain, while its mate winged its way up across the narrow field with all the speed that mortal fear could inspire, and disappeared into the friendly shelter of the afore mentioned clump of bamboo.

It all happened so suddenly and in so brief a space of time that we hardly realized what it meant. But as the terrorized cries of the Jay continued to arise from the hammock I exclaimed to my companion, "Something must have caught one of the Jays!" "Yes," said he, "it was a Blue Darter." And involuntarily we both sprang up and ran down across the field to the hammock, guided by the unceasing cries of the captured bird. I took a lane which ran along the edge of the wood, but my friend, more familiar with the location, turned into a by-path and the Hawk, hearing the noise of his approach, flew up and abandoned

its prey. The Jay immediately ceased its cries and, although apparently badly injured, managed to escape into the thick undergrowth.

After we had returned and resumed our seats on the piazza we suddenly discovered that something was missing which had helped to make up the beauty and glory of the day, it was the song and the sight of the birds. Where only a few moments before had been a scene of animation and the air aquiver with melody, not a bird was to be seen and an almost oppressive silence reigned; and those conditions continued throughout the balance of that day.

Death was stalking abroad in Bird-Land and the terror stricken inhabitants were endeavoring to escape the grim specter.

WALTER NATHAN PIKE, N. Y.

THE COTTAGE BY THE WOOD.



I T was the writer's good fortune to spend the summer months of the year 1900 in a cozy little cottage in a suburban district, the natural surroundings of which were such as to at once appeal to a naturalist, aside from furnishing ample opportunity for rest and quiet. The large lawn belonging to the property, with its abundance of shade trees, fronted on the main avenue of a populous corporate town, while in the rear, as the title implies, was a strip of woodland, which in turn, was bordered by a clearing, covered its whole length mainly by briars and low thick bushes,

being intersected by a winding brook.

Birds in the locality were quite numerous and some of them showed remarkable tameness. During the hours of night time, giving voice as it were to the weird lights and shadows around the house, we could hear the mournful ditty of a Screech Owl whose home was in a nearby hickory tree, while the first grey streak of each returning dawn was heralded by the sweet songs of the Robins. Flickers were frequently seen hopping around in the grass near the roots of various trees. Notes of the Yellow-billed Cuckoo were also heard in the thick foliage of the maples. Red-eye Vireos kept up a continual warbling all day long, and doubtless had a nest in the vicinity, as we observed the mother bird feeding two very young ones; the latter being perched in

a low bush in the yard. The happy song of the House Wren was always in evidence and three nests were built under the porch roof. The writer personally observed one of the broods leaving the nest, and was surprised to see two of their number climb up the straight trunk of a wild cherry tree—genuine woodpecker fashion—for a distance of twelve or fifteen feet, where the limbs began to branch out. However, they arrived at the top safely and remained there for the balance of the day.

Humming Birds often came and hovered over the many beautiful flowers in the yard and sometimes consented to alight for a few minutes for our benefit. On one of these occasions a party of five (including the writer's baby daughter) approached to within three feet of the tall flower stock upon which our little visitor was perched; still it sat there, turning its wee head this way and that, looking at us with fearless unconcern. At last it gave a sharp chirp, flew and was soon lost to sight. On one occasion in the early morning, we were greeted with the familiar call "Bob White", which seemed to come from the woods in the rear yard. The call was repeated several times but we were unable to discover the author of it. A tree of fine red cherries proved a great attraction for Cat birds and other feathered fruit lovers. But what we considered the greatest privilege, and one which we exceedingly enjoyed, was the daily greeting of the Wood Thrushes during the breakfast hour and at twilight. What could be more charming than to sit leisurely eating the morning meal and all the while listening to the sweet clear strains of the loveliest bird songs, pouring from the throats of the russet-brown vocalists just outside the kitchen window peal after peal, in endless volume and variation. In addition to the birds already mentioned, we sometimes heard the shrill scream of the Blue Jay, also the notes of King Birds and Crested Flycatchers, while from the distance, floating to us from across some field or meadow came the morning song of a Meadow Lark or the well known call of the Killdeer. The crows also added their deep caw, caw, caw, to the chorus of woodland voices. The clearing above referred to proved to be the home of two or three species of the Warbler family and a walk through the vicinity the following winter revealed a number of nests. They were all placed low and one of them showed every indication of having been built and occupied by an Oven Bird. A tame Chipmunk who resided under a board walk also proved of interest to us.

The usual wild flowers of the season were abundant and the surrounding country at large was admirably suited for exploration and research, hence our sojourn at the "Cottage" was one of pleasure and instruction.

Identification Chart No. 7.

Diving Birds—Grebes.

No. 2, Holboell's Grebe, (*Colymbus holboellii*.)

Length, 19 in. Crown, back of neck, and upper parts black with a greenish gloss. Secondaries white, forming a conspicuous white patch on the wing. A broad patch of silvery ash on the throat extending on the sides of the head and changing to white as it meets the black of the head. Front and sides of neck brownish red spreading well on the breast in a fainter shade. Under parts silvery white. Found throughout North America. Young birds and winter adults have the entire under parts, including the neck and throat, white, and the crests are entirely lacking.

No. 3, Horned Grebe, (*Colymbus auritus*.)

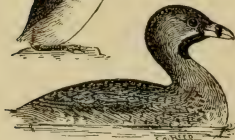
Bill tipped with yellow. A brownish yellow stripe over the eye and widening so as to take in the whole of the long crests. Crown, chin and the sides of the face, the feathers of which stand out making a full ruff, are a glossy, greenish black. Entire upper parts a brownish black. Front and sides of neck rich brownish red, this extending on the sides and flanks. In winter the crests are very small and the neck is a dull white. Length about 14 in. Entire North America.

No. 4, Am. Eared Grebe, (*C. nigricollis californicus*.)

Length, 13 in. Bill short, stout and black. Long golden brown ear tufts. Head and neck all around black. Other upper parts brownish. Sides reddish brown, this extending across the breast. Under parts white. No ear tufts in winter and the neck is sooty brown. North America west of the Mississippi.

No. 5, St. Domingo Grebe, (*Colymbus dominicus*.)

Length, 9.5 in. Bill very short. Upper parts brownish black with blue reflections on the head and neck. Entire under parts white mottled.

No. 6, Pied-billed Grebe, (*Podilymbus podiceps*.)

Length, 13 in. Bill bluish white encircled by a broad black band. Entire upper parts brownish or grayish black, most of the feathers having lighter edges. A broad black patch on the throat. Other under parts silvery gray mottled with dusky. In winter the bill lacks the black band and the throat is uniform with the other under parts. Throughout the United States and Southern Canada.

Crowned Sparrows.

No. 553, Harris's Sparrow, (*Zonotrichia querula*.)

Length, about 7.5 inches. Crown, face and throat, black, this extending on the chest and along the sides in broad streaks. Under parts pure white, except along the flanks which are dusky. Middle and greater wing coverts tipped with white forming two white wing bars. The young birds have the black feathers of the crown edged with grayish and the throat is generally white edged more or less with black. Found from the Rocky Mountains to the Mississippi.

No. 554, White-crowned Sparrow, (*Z. leucophrys*.)

Length, 6.5 in. Crown black enclosing a very broad white medium stripe. The black of the crown extends in front of the eye thus cutting off the white superciliary stripe. A narrow stripe of black extends back from the eye over the ears. Back and coverts grayish streaked broadly with brown. Under parts grayish fading into white on the throat and brownish on the flanks. Young birds have the black of the crown replaced with brown and the white dusky. Found throughout the United States and Southern Canada.

No. 554 a., Intermediate Sparrow, (*Z. l. intermedia*).

Exactly like the last with the exception that the black on the forehead does not extend in front of the eye. From the Rocky Mountains to the Pacific.

No. 554 b., Gambel's Sparrow, (*Z. l. gambelli*)

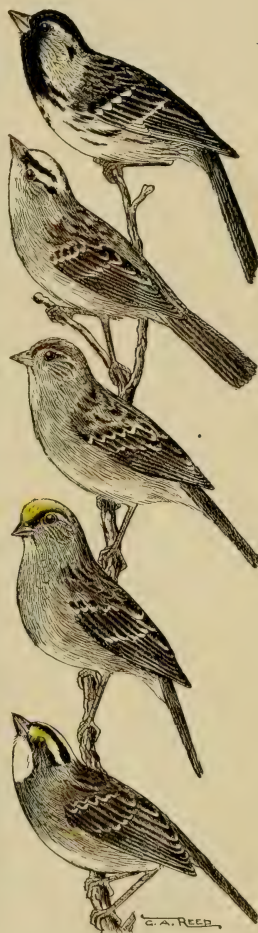
Head just like the last, but the back is more brownish and the streakings are sooty black.

No. 557, Golden-crowned Sparrow, (*Z. coronata*.)

Length, 6.5 in. Crown black enclosing a median patch of yellow. The black extends in front of the eye. Back rather olive brown streaked with brownish black. Edge of wing yellow.

No. 558, White-throated Sparrow, (*Z. albicollis*.)

Top of head black enclosing a narrow white stripe. A broad white stripe extends over the eye, that part between the eye and nostril being yellow. Edge of wing yellow. A black line from the bill through the eye, and another from the lower mandible downwards separating the white throat from the gray breast and under parts. Back striped with black, chestnut and dull white. Females and young are duller colored and the white throat is not always perceptible, but the yellow before the eye is always present.



BOBOLINK.

A. O. U. No. 494.

(Dolichonyx oryzivorus.)

RANGE.

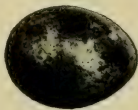
United States and southern Canada east of the Rocky Mountains. South in winter to Cuba and South America. Breeds from the Middle States northwards.

DESCRIPTION.

Length, 7 in; extent, 12 in.; tail, 3 in.; bill, black. Feet and eyes brown. Adult male in breeding plumage.—Head, chin, throat and under parts black. Back of head yellowish white. Scapulars, rump, and upper tail coverts, dull white. Tail feathers stiffened and pointed like those of the woodpeckers. Female and young, and male in the fall:—General color all over, a brownish yellow, this being a little lighter below. Top of head and back prominently streaked with black. Wings and tail blackish brown. Both the young birds, and male and female adults are somewhat more yellowish in the fall than is the female in the spring and summer.

NEST AND EGGS.

The Bobolink breeds abundantly throughout the northern portions of its United States range, placing its nest on the ground in large fields. The nest is made of dried grasses and is artfully concealed in a tuft of grass or weeds. The latter part of May or during June they lay from four to six grayish eggs that are heavily blotched, clouded and mottled with various shades of brown.



HABITS.

In nearly all respects the Bobolinks are our most peculiar birds. They come to their northern breeding grounds during the first half of May and for the remainder of the spring and summer their sweet music and comical ways endear them to the hearts of all their northern friends. The male bird is decked out in a fantastically arranged suit of black and white, that seems to put to naught all theories as to the protective coloration of birds. His black under parts and the contrasting white on the upper make him a mark that can not be overlooked as you scan a meadow. As far as the eye can see you can detect him perched upon the top of a weed or blade of grass.

His partner on the other hand, is dressed in the regulation garb of a



BOBOLINK.

ground bird, mottled brown and yellowish upper parts and lighter beneath so that she is but little noticed as she slips in and out among the grass looking after her affairs. From the time of their arrival until after the young have left the nest, the male Bobolinks are bubbling over with song, a rollicking jingle that has been immortalized by many literary geniuses both in verse and prose. These pen pictures of Bobolink music do but scant justice however to what the bird is capable of. Possibly an expert player on the mandolin might with a great deal of practice be able to give a fair imitation of the song, but I have never heard it.



Photo by C. H. Morrell.

NEST OF BOBOLINK.

Their nest, concealed in the long grass of the meadow is hard to find both from the fact that it is well concealed and also because the male Bobolink is a good guardian and always warns his mate when you are coming, so that she may glide away through the grass unseen. The highest point of an apple tree or the top of some particularly imposing stone on the wall are his chosen spots from which to look for danger and to serve

as the starting points for his melodious aerial excursions. Between songs he will often give voice to a deep "chee" as if to inform you that he belongs to the blackbird family. Even when it is evident that he is very much alarmed and that you are very close to the nest that he treasures so much, he cannot remain quiet, but in spite of sorrow will continually take short flights into the air and sing as though his throat would burst, always returning quickly to continue his harsh



FEMALE BOBOLINK.

scolding. A number of Bobolinks frequently build in the same field. On one day this summer I counted six male bobolinks in the same apple tree, all of whom had nests within a short distance. In the same field, there were nesting several pairs of Meadowlarks, a pair of Grasshopper Sparrows and two Bay-winged Sparrows or Grassfinches.

Soon after the young are ready to fly, during the middle of July the Bobolinks commence to moult and in another month the male bird

would not be recognized. He, his wife, and their young now all have the same dress of yellowish brown and are ready to begin their migration. The male has not only lost his brilliant clothes but his voice as well. His tongue will give voice to no more of the thrilling melodies until the coming of another spring. As soon as they leave their breeding grounds, they cease to be known as Bobolinks, and are called "Rice Birds." They now feed almost exclusively among the rice fields of the south, and from this they get their latin name of *oryzvorus*, which means "to eat rice".

A few weeks feeding on this diet nearly doubles their ordinary weight and they are regarded as a great delicacy for the table. Hundreds of thousands of them are killed every fall and served in the hotels of the south. Those that are left of them continue their way southwards into South America, there to stay until our climate again becomes to their liking, when once more they will return in their festal dress to gladden the heart of the farmers, who by the way, from a similarity in colors to a certain obnoxious animal have generally come to know them as "Skunk Blackbirds".

BOBOLINK.

Soaring high o'er meadows wide,
Skimming low at streamlets brink;
Gay and careless, free as air,
Happy bobolink.

Glad his song at break of day,
Gladsome when the sun does sink;
Maddest, merriest, melodies,
Blithesome bobolink.

What great happiness is yours,
What the joyous thoughts you think,
That your heart should be so glad,
Merry bobolink?

MABEL CORNELIA MATSON.

AMERICAN MERGANSER.

A. O. U. No. 129.

(Merganser americanus.)

RANGE.

Found throughout North America. Breeds from the middle of the United States northwards.

DESCRIPTION.

Length from 24 to 27 in. The female generally measuring an inch or two shorter than the male. Adult male;—Bill and feet vermillion, the former with a black tip. Eye carmine. Entire head and upper part of neck, a beautiful glossy green. Entire under parts white with a delicate salmon blush. Flanks washed with gray and waved slightly with dark gray. Back and scapulars black, shading to an ashy gray on the rump and tail. Primaries black. Most of the secondaries white, the inner ones having black edges. Wing coverts white, the greater ones having black bases, which form a black bar across the large white surface of the wing. Female;—Bill, red; Eye, yellow; Feet, orange. Fully as imposing and handsome bird as the male. Head with a long crest while the male has practically none. Head and neck reddish brown, leaving a white patch on the throat, and terminating abruptly against the white of the under parts as does the green neck of the male. The salmon color is present, but less distinct than in the male. Back, rump, tail, scapulars, and lesser wing coverts gray, most of the feathers having black shafts. Primaries and outer secondaries black. Middle secondaries and greater coverts white, the latter having black bases and gray tips forming an indistinct narrow bar across the white patch. Male and female have both mandibles serrated or toothed and the upper one with a very decided hook at its tip.

NEST AND EGGS.





AMERICAN MERGANSER.

During June Mergansers breed throughout Canada and the northern tier of the United States. Like the Wood Duck they sometimes breed in hollow trees. They have been found at distances varying from fifty to five feet from the ground. The bottom of the hollow in the tree is covered with leaves and grasses, and this is lined with soft down from the breast of the old birds. At other times they conceal their nests in the grass under an overhanging bush. They lay from six to ten eggs which are of a buffy color.

HABITS.

This duck and the other two Mergansers which constitute the saw-bill group of duck, are called fish ducks because these form a large part of their diet, and thus render their flesh unpalatable. Although they are absolutely worthless as articles of food, thousands of them are shot yearly by sportsmen who will shoot anything that swims or in fact that flies. In the spring and fall "Goosanders" or "Sheldrakes" as they are popularly called are very abundant both in the interior and on the coast, as they are partial to both fresh and salt water.

In the autumn and winter they assemble in small bands of up to a dozen individuals. Although they appear to be quite social among themselves they do not so often mingle with other species of ducks.

They are also quite shy in the presence of man, the male birds rather more so than the females. On the land they are quite awkward in their manners, although they can travel at a good rate when forced to. The water is their natural element and they are equally at home either above or below surface. It has been said that when their nest is at a distance from the water they will carry their young in the bill after the fashion of the Wood Duck.

BIRD ENEMIES.

When one thinks of all the enemies our birds have to contend with in raising a family it seems really a wonder that we have so many of them to sing, eat insects that would destroy our flowers and grain, and in every way make the world brighter. Think of a small delicate bit of creation like the warblers, trying to sit on the eggs during a wind storm, or worse a hail storm. In the woods there is some protection, but on the prairies where the Horned Lark makes its perfect little cup of grass, lined with grass roots there is no protection from hail, water, skunks, badgers, snakes or the feet of grazing cattle.

It cannot be estimated how many eggs are laid to give us a flock of one hundred of these cheery little friends that stay with us through the year. And when the Kansas blizzard comes where are they? As the sky begins to show signs of a storm they are more restless as if searching for a good location where the snow cannot cover all the weeds that furnish them with food. Snow storms often begin in the forenoon and by night the ground is well covered and the wind begins to drift it in long ridges. By morning a foot of snow has fallen, the storm has passed and the sun is dazzling bright reflected from the clean white snow.

But here are the larks, called snowbirds, busy at some weed that still has its top above the drifts. Did the birds keep moving all night to keep on top, or let it drift over them and burrow out in the morning?

I consider snakes of all kinds the worst and most common of all enemies to birds, either song or game birds. They also kill many toads that catch the nocturnal worms and bugs, such as the cutworms and June beetles, that birds do not get. The snake is generally credited with destroying many mice and gophers, but of the large numbers that I have killed and opened only in very rare instances have I found anything but birds eggs, toads and young rabbits or young birds. I once found a bull snake that had gone after a gopher and seemed to have found it, for he could not get out of the hole again farther than where the gopher was in his stomach. The sun soon put him out of his misery, as snakes cannot stand direct sun heat as is often supposed. The dust around the hole showed how the snake had worked to free himself. When a bull snake of three or four feet in length finds the nest of a quail or prairie chicken every egg is sure to go down his cold disgusting throat. The blue-racer, the harmless (?) garter snake are all just as fond of eggnog without the nog as the bull snake.

One nest of a game bird is worth more than all the mice any lazy sneaking reptile could get up the energy to catch during his life time.

Often I have found snakes quite a distance up in the trees after eggs. It is a mystery to me how they can locate a nest, and find the right tree to climb. I pulled a large bull snake out of a Yellow Hammer's hole, that had swallowed several great squabs or young ones while the old birds were making a good fight for them.

A. K. BOYLES, Salina, Kan.



Address communications for this department to

MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

MY DEAR YOUNG FOLKS:

Perhaps some of you who sent answers to "Nuts to Crack in the June Bird Chats" were disappointed when you found the answers given last month were unlike yours. But your answers were correct too, as most of the nuts contained more than one kernal. Two definitions of a Merrythought were especially good, so I pass them on to you. One writes "If you mean a bird, I think it is a Purple Finch, because his song sounds like "Be cheery, Oh!" Another defines it as "any thought relating to birds." Stafford Francis has been successful in finding nests of large birds this year. He writes of finding the nest of a Bittern, containing two eggs, two Partridges' nests with eleven and twelve eggs, a Marsh Hawk's nest and the nest of a Great Horned Owl, as well as the nest of a Nighthawk and others. To the questions of our little Ohio friend, Lillian Weeks, I would reply that the first bird she describes is doubtless a Blue-gray Gnatcatcher, the second a Great crested Flycatcher, the other bird I am unable to name without a more minute description. If she can secure the Gnatcatcher's dainty nest when they are through with it she will be fortunate, and if she puts her hand into the hole in the apple tree, she will find the nest of the Flycatcher is lined with the skin of a snake. During August, Birdland is very quiet, but I am sure your sharp eyes will find something of interest even in this month, among the feathered gentry, and that you will write about it to your friend,

MEG MERRYTHOUGHT.

The answer to the Enigma in the July number is Partridge.

These were the birds which told their names in the story of last month. 1, Scarlet Tanager; 2, Chickadee; 3, Chebec; 4, Pewee; 5,

Phebe; 6, Towhee; 7, Jay; 8, Bob White; 9, Bobolink; 10, Flicker; 11, Cuckoo; 12, Chat; 13, Vireo; 14, Nighthawk; 15, Thrush.

ROLL OF HONOR:—Edgar Easton, Age 7, Charleston, Ill.; Chas. H. Rogers, Brandon, Vt.; Stafford A. Francis, Age 14, Exeter, N. H.; Hubert Dodds, Charleston, Ill.

JENNIE WREN.

A little brown mite is Jenny Wren,
Who once, never thought of rest,
But busily worked from morn till night,
When lo! A beautiful nest.

Six tiny eggs it held one day.
As pretty as they could be.
They were the pride of Jenny Wren,
And a happy bird was she.

In a short time six baby wrens
Were occupants of the nest,
And the mother bird thought that they
Were better than all the rest.

The little wrens with feathers fine,
One morning late in May
Heard the call that the father bird gave,
Then all of them flew away.

CLAUDE A. BARR, St. Louis, Mo.

DAISY.

On a bright May morning when everything was its brightest and the grove rang with the voices of many birds, a dear little yellow bird lit under our kitchen window. He was not timid in the least, for he kept screeching for dinner while we had our faces near the window watching him, as he was a stranger in our grove. By the identification chart in the May number of the American Ornithology we found him to be the Yellow Warbler. In the evening he and his mate came back to visit us. Now and then they would fly against the window trying hard to catch the millers that fluttered upon the inside of the pane. We placed freshly killed millers upon the outside window sill which they willingly took.

A day does not pass but our little bird "Daisy" as we named her, comes to our window and takes the millers she finds waiting for her. In a plum tree a rod from the house, these little friends built their

nest of cotton batting and straws. The male does not come to the window now, so Daisy often carries the food to him as he guards the nest while she is gone. Daisy is our little friend now, and as she sits on the window sill looking for her millers, which are gone, she chirps asking for more, which we quickly bring.

MARIETTA WASHBURN, South Dakota.

PI containing fifteen different parts of a bird: 1, worcn. 2, rafdeceho. 3, deanbilm. 4, pean. 5, attroh. 6, streab. 7, teso. 8, mapriries. 9, gwin-crevsot. 10, slapscaru. 11, gwin. 12, atli. 13, roles. 14, prum.

What common birds are suggested by 1, A high official in the Roman Catholic Church? 2, A goat? 3, A common household pet? 4, An animal of great use to man? 5, A piece of money? 6, A crowned ruler? 7, A part of a mountain range? 8, A girl's name? 9, Part of a country fence? 10, The act of drinking? 11 and 12, A flogging.

THE BABES IN THE WOODS.

How many of our young folks can give the names of these ten babies which I found in my little journeys in the woods in June? I am sure you would be able to name very few of them unless the parent birds were seen, for these woodland infants seem to consist chiefly of a gaping mouth attached to a limited amount of gray skin and bones.

As I was walking along a shady road, my attention was called by a constant "chirp, chirp," to a little fellow clad in a gray downy coat, holding on for dear life to a short branch far above my head. His voice was hushed for an instant only, by a worm brought by the mother, a bird a little less than six inches long, with beautiful yellow throat and breast, upper parts an olive green, two wing-bars of white, and a yellow ring about her eye. From a higher branch hung a dainty cup, covered with grey lichens, which the little fellow had but recently left.

Near by was a mud plastered home, to which two olive-grey parents with breasts of red, traveled constantly with worms, berries, millers and all sorts of goodies to satisfy four greedy mouths.

Turning into a path through the woods, I followed a voice which seemed to say "Drink your tea" and through the leaves caught a glimpse of a black and white bird with chestnut colored sides. A short search revealed a home on the ground, beneath the shelter of a blackened log.

A brown bird, with a long tail and a spotted breast hopped along the

path ahead of me, with a worm in her mouth. She was going away from her home not towards it. She knew from sad experience that mankind was not to be trusted, and hoped to lead me away from her home in the undergrowth.

Turning from the beaten path, I almost stepped upon a dear little fellow which had but recently left its arched cave like home among the dead leaves, faint stripes showed upon its crown, and the tiny olive-green wing feathers had appeared; but the rest of its body was still covered with a soft downy coat, which in a few weeks would change to the thrush-like plumage of the mature birds.



Photo from life by C. A. Reed.

YOUNG FIELD SPARROWS.

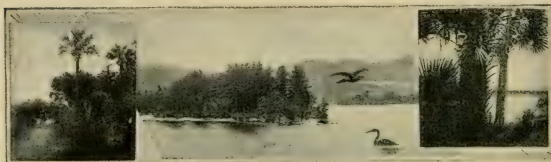
Then I noticed a slight movement in some indigo weeds at my right, as a cautious mother slipped away through the bushes, and parting the green sprays, there was a dainty structure of grasses and fibre, its rim encircling four wide opened yellow mouths. From a distant tree a little fellow in olive green with a bright yellow breast streaked on the sides with black, cried in an ascending scale: "see, see, see, see." We sauntered on, past a black and white bird wearing a red cap, who with his long straight bill was patiently hammering grubs from a dead tree trunk for his children, who looked well able to care for themselves. We past a scarlet and black beauty, who, with his green mate, was training up his plainly clad young in the way they should go. Past a dainty sprite clad in an entire suit of rich plain blue, who caroled to us of the bulky nest of grass which was swung between the tall stalks of

some cinnamon ferns in yonder field, where even now the little sparrowy mother was busily engaged in supplying food to the hungry occupants. On, past many a cradle rocked by murmuring breezes, until we came upon the prettiest sight of all, a dwelling of twigs, leaves and grass, about four feet from the ground, shaded by glossy, green laurel leaves. On the farther edge of the nest sat the mother bird, seemingly very proud, (as well she might be) of her four little ones which the nest would hardly contain. The youthful members of the family were nearly ready to go out and seek their fortune in the great world, for they had donned their brown coats and white vests with trimmings of dark brown spots, and their bright eyes looked out fearlessly upon a world of untried adventure. When next I passed that way they were gone, but from the slopes beyond came sweet bell like notes telling me that at least part of the family was safe and happy.

GLEANINGS.

A bird's nest, mark it well, within, without,
No tool had he that wrought, no knife to cut,
No nail to fix, no bodkin to insert.
No glue to join; his little beak was all.
And yet how neatly finished! What nice hand
With every implement and means of art,
And twenty years of apprenticeship, to boot,
Could make one such another?—HURDIS.

Do you never think what wondrous beings these?
Do you never think who made them, and who taught
The dialect they speak, where melodies
Alone are the interpreters of thought?
Whose household words are songs in many keys
Sweeter than instrument of man e'er caught.—LONGFELLOW.



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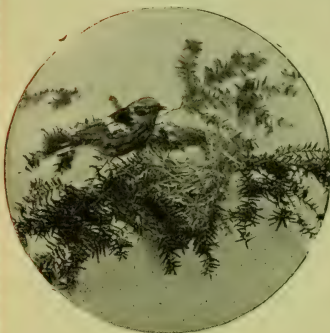
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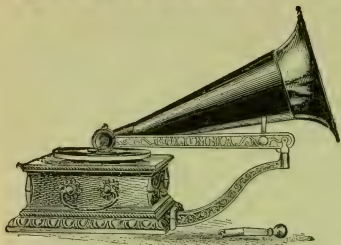
FOR THE HOME AND SCHOOL



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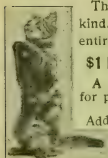
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THE BATTERY UNLIMBERED.

THE BLUE JAY THEN AND NOW.



ONG years ago a wandering inquisitive blue bird in search of a nesting site, found an opening in a rainwater conductor, which led him to a full hogshhead—and suicide. This unfortunate drowned bird was stuffed and mounted on a rustic perch by an ancient hermit taxidermist. This bird, the work of Nature and Art combined, was long the delight of the wondering juveniles of the family which was so fortunate as to possess it; but one evening little sister unwittingly placed a lamp in such juxtaposition to the specimen that its tail went up in fragrant (?) incense, and great were the

lamentations thereat. Nevertheless this seeming calamity proved a blessing in disguise to one member of the family. Little brother, who had the budding instincts of a naturalist, who kept the house littered with last year's bird's and hornet's nests, rocks, snake skins, tortoise shells, bones, lichens, etc., who had constructed a large case, the compartments of which he had filled with birds eggs of many kinds, saw in this unfortunate accident a golden opportunity. He had spent the early morning hours of Spring and Summer, in watching the common birds of field, orchard and woodland, He had learned their names and notes, and, boylike, he now longed to "collect" them.

The stuffed blue bird had awakened taxidermic ambitions and the ruin of the specimen furnished him with opportunities for the acquirement of useful knowledge, which till then had seemed unattainable. The stuffed bird and its rustic perch were both dissected. A book on taxidermy was obtained from the library and the mystery of bird stuffing was solved. Next came a thirst for the blood of the innocents. A deadly weapon was sought and found in the possession of another boy in the neighborhood. A trade was made. Seventy-five cents changed hands, and an old musket with a loosened sawed off barrel and broken lock changed owners. Boyish ingenuity was brought to bear on the loosened barrel and broken lock and for many moons that crude weapon carried on its work of destruction among the furred and feathered inhabitants of the woods; while under the midnight oil the collection of skins and mounted specimens grew apace.

During all this time there was one crafty bird that always kept beyond



Photo from life.

THE FIRST SHOT.

(Just after feeding.)

the reach of a charge from the cut-off barrel. Morning after morning the harsh incisive alarm notes of the Blue Jay warned all creatures to beware of the hunter. Day by day while the boy was busied with his tasks at school this cry of the Jay rang in his ears. Early and late he sought the crafty creature through the glens, but Spring departed, Summer waxed and waned, and the Autumn leaves were rustling down, ere his patience was rewarded. He had learned by this, time "as he believed" to know the peculiar significance of each different call and to imitate some of them. Behold him seated on a rocky eminence one

chilly Autumn morning, hoping for the appearance of the bird he longs to possess. He gives a few shrill decoy calls which deceive an incautious Jay whose answering cries announce its near approach. A glimmer of blue, black and white flashes across the bright autumnal foliage. Instantly the gun is at the shoulder. As the echo of the report rattles through the woods something is seen to fall faster than the falling leaves. The Jay is gathered to his father's. The boy has won his long coveted prize at last. Who can describe the ecstasy which follows that fatal shot—the delight of that misguided boy as he gloats over his fallen victim. There it lies in beauty between two moss grown rocks. The barred tail and wings broadly spread, the dark eyes open, moist and slowly glazing. The benighted assassin whoops and dances with delight in the exuberance of youth and hugs his miserable apology for a gun. Then the method of the naturalist asserts itself and he draws forth note book and pencil, but not content with merely making the usual entries he attempts to transfer his feelings to paper, and here is what we may yet read in the old note book. "Aha old robber! Destroyer of young birds, thy race is run. Never again wilt steal the farmers corn. Thou hast died as a bold robber should with thy boots on." Here a long pause ensues for the silence of the woods is broken by the mournful cry of the slain Jays mate. At her call charity, pity and mercy have come as tardy guests. The written page goes on "Still although thou art an outlaw, proscribed by man, perhaps thou hadst as good right to life as I. Alas all is done. Regrets are vain. Farewell to earth, thou forest planter. Farewell now to the wooded hillside, to summer's sun and winter's snow. In the evening shades thy mate shall call among the falling leaves like a mournful spirit, searching long through the darkling woods which shall never know thee more."

So it was in those days. Those of us who studied the living bird at all studied it first over the sights of a gun and then measured and dissected the bleeding corpse, prepared the skin, duly labelled it and called our duty done. Consideration of the rights of the bird came afterward, if at all. Today all is changed. The few "collectors" are in the sad minority, the work of the systematist is largely done. Now we look at the living birds through an opera glass and study their habits afield, and our most trusted weapon is the camera. The Blue Jay skin shot so long ago still rests in a glass case, and the boy, now the father of other boys, teaches them to use more modern weapons of his craft. Now instead of luring the Jay to its death, we disarm its apprehensions by acting the part of protector, benefactor, and friend. We assume that attitude toward it which makes it an associate in our daily walks and occupations. Render the bird un-



SHOT NO. 2.
(About to clean the nest.)

Photo from life.

suspicious, tame it, or domesticate it and you experience all the advantages of possession, without taking its life or abridging its liberty.

In this way only, can one associate so intimately with the living bird, that he can study its character, emotions, language and food understandingly. For years I have looked forward to the time when opportunity could be afforded to study the nesting and food habits of birds by such intimate association with them. This hope seems at last about to be realized. Two years ago sufficient leisure was assured to admit of a search being made for a promising locality. A bicycle trip along the Massachusetts coast from New Hampshire to the Rhode

Island line resulted in the choice of a small farm in Wareham, near the head of Buzzards Bay. This place situated near the confluence of two tidal rivers, appears to be in the direct line of bird migration on this coast. Surrounded by open meadows, fields and diversified woods, watered by brooks, flowing from living springs, within easy reach of Plymouth woods, where the deer still roam, it offers unlimited opportunities for bird study. On the bay and the adjacent waters, seabirds breed or migrate. Along the small streams, shore birds and herons come and go. Here the Fish Hawk and Bald Eagle are commonly seen. Waterfowl find sheltered resorts in many ponds in the great woods. Hawks and owls also find in these woods secure nesting places. The immediate surroundings of the farm are such that the birds of field, orchard, wood, meadow and marsh, are always near at hand.

The first problem to be solved was how to attract them about the farm and garden. We found here a grove of white pines about four acres in extent, directly south of the house, which seemed to be calculated for a natural retreat for Blue Jays. The first summer proved also that it was a great Robin roost. Hundreds of Robins roosting there nightly when the berries with which the country teems, have well ripened. Our first attempt at taming the Jays consisted of fastening bones, meat and suet upon the trees near the house. The birds were very wary for the first two or three months, but at last, one cold morning in winter, they were seen busily engaged in securing food from a "baited tree" near the house.

Small branches were next fastened up to the kitchen and dining room windows, and there the most tempting food was exposed. The wary rascals watched from afar until the Chickadees and Nuthatches had frequented these windows for about two months. They made stealthy approaches, first coming to the thicket beyond the garden, next to the old pear tree on the hither side, then to a small heap of cinders thrown out to them to assist their digestion, and finally one snowy morning in January a loud hammering began on the window sill at day-break and there was Blue Jay helping himself. After that the Chickadees got very little food at that window for a time, for the Jays would tear away and carry off everything in the way of meat or suet that was put out. Bones with shreds of flesh and cartilage on them were then nailed fast, and the Jays soon became so tame that one could sit at the window and watch their feeding, their antics, and their quarrels going on just outside the glass. It is indeed a novel sight to find three or four great handsome Blue Jays about your window on a cold morning in February. By feeding the Jays a little all winter and putting out food

about the door in the Spring, their shyness was so far overcome that they became accustomed to our presence. In the Spring one came in to the shed where it was easily caught, handled gently and released. This seemed not to alarm it for it remained near, and two pairs of these birds built their nests and reared their young near the house. One of the old birds finally became so fearless that she allowed a boy to climb to the nest and take her in his hand. On being released she did not fly away but quietly returned to the nest and settled on it. The Jays were not molested during the Summer and were given refuse grain and meat during the Fall and Winter.

They had, by this time, so increased in number that six nests were built in the Robin roost last spring. Here they would have little difficulty in rearing their young were it not for the gray and red squirrels which have also increased in number. These animals have a well known fondness for the brains of young birds. Three pairs of gray squirrels and a larger number of the red species now inhabit the robin roost to the great worryment of both Jays and Robins. The Jays are fond of Robin's eggs. So fond indeed that although some thirty nests of Robins have been built near the house each year, less than twenty young birds have reached maturity.

All through the season the shells of Robin's eggs could be found about the place with holes showing where the sharp bills of the Jays had perforated them. Very often indeed the "stop thief" of the Robins



Photo from life.

SEARCHING THE HEAVENS FOR FOOD.

was heard as they chased the dashing intruder, who strove to make good his escape with an egg on his beak. Although the Jays and Robins had many fierce battles they always joined forces against the common enemy. Thus six or eight of them might often be seen making desperate efforts to drive a squirrel away from a nest. Although

the squirrel by dodging round the tree could easily avoid the rushes of a single bird, he was unable to escape the combined attack of several, for while avoiding one he would be pounced upon by another. The birds would dive upon the squirrel in turn, each giving one peck and getting away until the poor squirrel was forced to retreat precipitately. This season several young Jays were stolen by a Marsh Hawk. This bird is too strong for the parents. He gives them no time to concentrate their forces but swoops down to the nest snatches a young bird and bears it away to his home on the marsh followed by the screaming parents. The Jays feed their young largely on soft bodied caterpillars. Some of the birds begin their nesting operations the latter part of June, so there is an opportunity for observing their nesting habits for about two months.

Early in June of the present year, the editor of this magazine honored us by a visit. He appeared with camera and photographic outfit. At the time of his visit there was but one easily accessible nest with young Jays in it. The others were mostly high in the trees. This nest was situated about nine feet from the ground on the south side of a tree on the sunny side of the grove, and well out toward the end of the branches. Here the light was good, and as the birds had frequently fed the young when we were near the nest, we assured Mr. Reed he would have no difficulty in catching one of them in the act. The first picture shows how the camera was raised into position. The apparatus used may appear like "heavy artillery" to the casual reader. But the log truck with its long wagon box proved to be exactly adapted to the purpose in this particular spot. It was backed up under the tree so that its hinder part was directly beneath the nest. The camera was then mounted on long stilts, a few branches were tied out of the way, and it was focussed.

The birds being very unsuspicious came and went often, feeding their young about as usual, although doing it very quietly and in a more stealthy manner than common. To one who has heard much about the difficulty of photographing the Blue Jay at the nest this seems rather unusual. Probably much more difficulty would have been experienced had not the birds learned that they were safe from harm at our hands.

The second and third pictures show the parent bird at the nest. In the second the camera was snapped while the bird was in the act of feeding, but as seen in the picture she has gotten a little ahead of the camera, for she has already fed the young and raising her head, is now looking directly at it. The typical loose construction of the nest and its position on the bough of the pine can be plainly seen. It was placed well out toward the end of the bough where it was normally concealed by the foliage of the limb above, which hung low over it and had to be temporarily pulled aside for the purpose of the photographer. The bird usually enters the nest by flying into the lower part of the



Photo from life.

OUT IN THE WIDE WIDE WORLD.

tree, and then hopping spirally upward from bough to bough around the trunk, creeps out along the branch, reaching the nest usually from the rear, as it were, thus avoiding the observation of her enemies. These birds are almost constantly busy in feeding their young and cleaning the nest, and to one who will watch them for a few days, Dr. Brewers statement that a family of Jays consumes a million caterpillars in a season will not seem incredible. The four young in this nest were not quite fledged at the time they were visited by the artist (June 10) and they were always hungry. In the picture of the nest three of them have their heads up and their open mouths turned toward their devoted parent. The other no doubt, is swallowing the food that has just been given him. The next picture gives a slightly closer view of the same young birds on a branch, apparently searching the blue arch of the heavens for more food. In their callow youth they will bite greedily at anything, and there is little that comes amiss to them in their more mature years. These little fellows were taken from the nest and perched on the limb where they remained without manifesting any fear and what was still more remarkable, the parents on their perches in the near by trees evinced no alarm and uttered no complaint. They conversed quietly with each other aside, as if they should say "These are some of our people from the farmhouse. Let's not say a word. Perhaps they will take the job of feeding the children off our hands for the rest of the day." As we replaced the young in the nest the old birds immediately bestirred themselves and began feeding them. The young grew rapidly, and on June 15th they went out into the wide, wide world. Owing to lack of time and space we must defer the remainder of this chronicle to another issue.

EDWARD HOWE FORBUSH.

THE BLUE JAY SURGEON.

Someone aptly says;—

“Our crested Jay with all his beauty
Has neither sense of right nor duty.”

And farther on;—

“Wherever he assumes his station
He is master of the situation.”

The writer was evidently acquainted with the Blue Jay in all his moods and variations. Some years ago a young student of Blackstone had in his possession a beautiful Blue Jay. During the day time Jack, for that was his name, had free range of the office, and amused many callers with his cute, saucy tricks. At one time his master was the possessor of a fine carbuncle, located on the back of his neck, that gave him great pain, so that he was forced to discard collar and tie, wearing only a silk handkerchief about his neck. One morning even that became unbearable, and doffing coat, vest and “kerchief” he sat down at his desk and was soon deeply engrossed in his reading.

Jack had been fed and let out from his cage and was now busily engaged in looking about for some mischief. As was often his custom when flying about the room, he alighted on the back of his master's chair, and began to call, hoping to arrest his attention; but the student was so busily engaged in his reading, that either he did not hear Jack or did not want to. Finally Jack spied the fine carbuncle on the back of his master's neck, and hopping on his shoulder, began a tour of inspection.

He viewed it from first one side, then the other, then from the back of the chair, but seemed to arrive at no definite conclusion. Finally, cocking his head on one side, he communed with himself thusly: “I think it's a carbuncle. It's just in prime condition, why don't he have it lanced? Ah, I know. It's because he can't see it. No man has eyes in the back of his head. I guess I will do the job myself.” Hoping around to the other shoulder, he carefully wiped his bill on his master's shirt, then giving him one keen glance, he drew back, took aim, and with one blow drove his beak to the bottom of the carbuncle.

With a shout, the embryo senator leaped half way to the ceiling, the perspiration oozing from every pore. His threats to “kill that bird” were of no avail and Jack from his perch over a picture only screamed back defiance as he carefully wiped his lancet on his glossy feathers.

MRS. L. MAY DEAN.

RED-TAILED HAWK.

A. O. U. No. 337.

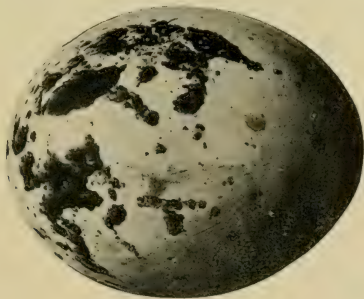
(Buteo borealis.)

RANGE.

Found through southern Canada and the United States east of the Plains. Breeds throughout its range except in the extreme southern portions. This species is subdivided into the following varieties:— 337a. Krider's Hawk (B. b. kriderii). Found in the Plains in the middle portions of the U. S. 337b, Western Red-tail (B. b. calurus). North America west of the Rockies. 337c, St. Lucas Red-tail (B. b. lucasanus.) Peninsula of Lower California. 337d, Harlan's Hawk (B. b. harlani.) The lower Mississippi valley along the Gulf coast north casually to the middle portions of the U. S.

DESCRIPTION.

Length about 22 inches; extent about 50 inches; tail 9.5 inches. Eyes, brown. Cere and feet, yellow. Upper parts, brownish black, the feathers being generally edged with lighter. Under parts white tinged with buffy. A broad zone of dark markings crosses the abdomen and the color of the upper parts is continued around the throat. The tail is a rich reddish chestnut with a narrow white tip and a broader sub-terminal bar of black. The young birds are similar in plumage except that the tail is gray and is crossed by eight or ten black bars. Krider's Hawk is a light form of the above and is entirely white below. The Western Red-tail varies from about the typical form of the eastern to a uniform dark sooty brown, and the tail is generally banded. Harlan's Hawk varies from the typical Red-tail to nearly black and the tail is mottled with rusty, white and dusky.



NEST AND EGGS.

The Red-tail places its bulky nest well up in the high trees of dense



RED-TAILED HAWK.

woods. It is a rather shallow platform of sticks and lined with twigs, grasses, moss or anything that it may happen to pick up. The eggs are laid according to the locality from the latter part of March until the end of May. The eggs are a bluish-white in color and vary greatly in markings. Some are unmarked, and others faintly, while still others will be heavily dashed, blotched and spotted with varying shades of brown. They lay from two to four eggs, the former number being much more common than the latter.

HABITS.

A bold, powerful and handsome hawk, this species is capable of



Photo by C. A. Smith.

NEST OF RED-TAIL.

creating great havoc among others of the feathered tribe, both wild and domestic. He is also capable of being of immense value to all who are interested in tilling the soil, and the trend of investigations have established the fact that he is to be considered as a valuable bird. Doubtless many of these hawks will from choice prefer a dinner of poultry, but then who among us humans does not like the same diet; but even if I were a poultry raiser, I doubt that I would declare war on everything that bore resemblance to a hawk because one of them now and then carried off a chicken. As for the chicken I doubt if he has any preference between being guillotined with an ax and strangled in a hawk's talons.

The Red-tails' piercing, but pleasant whistle may be frequently heard as they soar at astonishing heights. Without a visible tremor to their wings they will describe circle after circle, each above the other till the aching eyes of the watcher can no longer make out their form in the heights above. Surely such sights as this are worth the occasional loss of a chicken. At least half of the food of the Red-tails consists of the destructive meadow mice. Other elements that enter into their diet are small animals, reptiles, frogs, insects, etc., and less than ten per cent. of their food is made up of poultry or game birds. In fact it

is only when the supply of the former is exhausted that they will turn to the latter. The numbers of Red-tails in Massachusetts have decreased amazingly in the last few years both from the cutting off of the heavy timber and through the destructive agencies of mankind. In the Fall they frequently band together into flocks and migrate to the southern parts of the U. S.

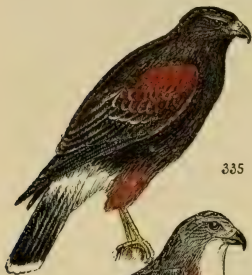
I live in hopes of seeing the day when the word "Hen Hawk" will be unheard, and this hawk, as well as others of the family may enjoy the peace and prosperity that they deserve. When we come right down to the fine points of the game, and are judging the right of a bird to enjoy life solely by his usefulness in serving the ends of mankind, who is to judge us, who kill beast, bird and fish merely to satisfy the demands of a greedy appetite, or worse still "just for sport."



Photo from life by C. A. Smith.

WESTERN-RED TAIL.

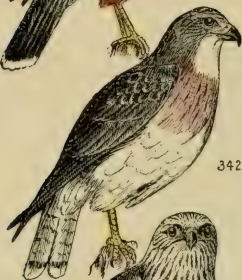
Identification Chart No. 8.

Hawks.

335

No. 335, Harris's Hawk, (*Parabuteo unicinctus harrisi*.)

Length about 21 inches. General color blackish or dark brown. Shoulders, lining of wings and tibia, rich chocolate brown. Tail coverts and base of tail, white. Tip of tail also white. Found throughout the southwestern states from the Mississippi to the Pacific. This hawk is sluggish in movement and feeds extensively upon carrion and associates with the vultures. The plumage of the young is more brownish and the tibia are whitish, barred with chestnut.



342

No. 342, Swainson's Hawk, (*Buteo swainsoni*.)

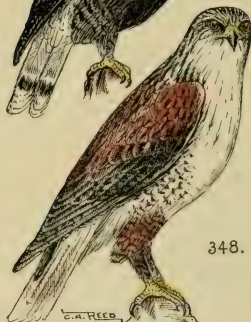
Length, 20 inches. Upper parts brownish gray. Chin and throat white. Breast pale chestnut, the feathers having black shaft lines. Rest of under parts whitish, more or less barred with light brown. Tail the same color as back and crossed by a number of dusky bands. This hawk varies greatly in plumage at different seasons and ages and may be found from the above description to nearly a uniform blackish brown. Western portions of North America from the Arctic region to Mexico. Rarely east of the Mississippi valley.



347a.

No. 347a, American Rough-legged Hawk, (*Archibuteo lagopus sancti-johannis*.)

Length about 21 inches. Legs thickly feathered down to the base of the toes. Head and neck, dull white, streaked with dusky. Rest of upper parts dark brown. A broad band of dusky across the belly. Base and tip of tail, white. From this plumage it varies to black but may be known by the feathered legs. Found throughout North America.



348.

No. 348, Ferruginous Rough-legged Hawk, (*Archibuteo ferrugineus*.)

Length about 24 inches. Legs feathered to the toes. Upper parts rust brown, brightest on the shoulders. Under parts whitish, faintly barred with reddish. Thighs rusty and barred with dusky. Tail, white, washed more or less with brownish. Found in the United States west of the Mississippi, and in southern Canada.

Owls having elongated ear tufts.**No. 367, Short-eared Owl, (*Asio accipitrinus*.)**

Length about 17 in. Entire plumage varying from a bright tawny to a buffy white, streaked above and below with dark brown. A broad black stripe entirely encircles the eyes. Ear tufts small. Found throughout North America. Breeds from the middle section northwards.



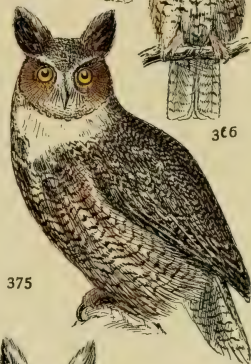
367



366

No. 366, American Long-eared Owl, (*Asio wilsonianus*.)

Length about 15 inches. Ear tufts very conspicuous. Above dusky, mottled with tawny, gray and black. The facial disc is inclined to a bright chestnut color. Under parts grayish white, streaked, mottled and barred with black and tawny. Found throughout temperate North America. Breeds wherever found.



375

No. 375, Great Horned Owl, (*Bubo virginianus*.)

Length from 20 to 25 inches. This owl is very large, strong and heavy. The ear tufts are very conspicuous. Plumage of the upper parts irregularly variegated with zigzag lines of black, tawny and whitish. Tail mottled grayish white, and crossed by a number of dusky bands. Under parts whitish, washed with tawny and barred closely with black. Facial disc tawny and edged with black. A large white patch on upper breast and throat. The typical species is found in North America east of the Mississippi. The same bird is found in different phases throughout the country and is subdivided as follows:—375a Western (*Bubo virginianus subarcticus*.) This is a somewhat paler bird and is found from the Great Plains westwards and south to Mexico. 375b Arctic (*Bubo virginianus arcticus*) is found in the interior of Canada and in the middle of the northern tier of states. It lacks the tawny color entirely and is marked with black and white. 375c Dusky (*Bubo virginianus saturatus*) is found along the Pacific coast from Alaska to the Mexican border and is the darkest variety and shows little tawny.



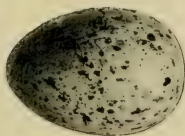
375b

C. A. REED

THE WESTERN MEADOW-LARK.

One of the most common birds of our eastern lowlands and hillside pastures is the lyrical meadow-lark. Every person who uses his eyes has seen this bird's golden breast flashing in the sun as he sits on a fence stake and pipes his blithe, wavering melody.

You are doubtless aware that the familiar lark has a cousin which chooses our western prairies and plains and mountain parks for his dwelling place? He is known as the western meadow-lark, and has the Latin adjective *neglecta* affixed to his name to distinguish him from his eastern relative.



There is slight difference in the appearance of the two birds. Indeed, unless you had them in hand, or were very close to them in the open field with a good glass, you could not be absolutely sure whether any given birds were easterners or westerners.

However, they are not precise copies of each other. For instance, in the eastern form the yellow of the throat does not reach out laterally over the malar region—that is, the region of the cheek—whereas in the western form it does. In general the upper parts of the western bird are paler and grayer and the black markings less distinct and confluent than are those of our eastern piper. The flanks and lower tail-coverts of the eastern lark are more or less heavily washed with buff, while these parts of the western type are white, only faintly tinged with buff, if at all.

Thus it will be seen that there are three clear external markings whereby you may tell the two species apart.

But, much as it might puzzle you at times to distinguish between them by their outward appearance, you would experience no such difficulty the moment the minstrel of the west opened his mandibles to sing you an aria. One spring I went down into Oklahoma to study the birds, and found both kinds of meadow-larks in great abundance on the broad prairies, and again and again I heard them singing—or, rather, whistling—at the same time. The following paragraph is quoted from my notes taken on the ground:

“Sitting on a weed-stalk, or a fence post, or the grassy prairie, the easterner whistles or flutes his clear, two-part melody, which seems to fly like an undulating shaft across the fields; his cousin, the westerner,



WESTERN MEADOWLARK.

pours forth a quaint, varied run, containing some gurgling notes which sound as if there was water in his larynx, or as if the palpitating air were thrown back upon itself and churned into music by some peculiar muscular movement of the windpipe. The eastern bird seldom varies his song, and even when he does, the change does not amount to a great deal; not so with his gifted relative of the west, which rolls one distinct tune after another from his wonderful throat, sometimes chanting three or four different tunes in as many minutes, although his usual habit is to repeat one strain several times and then suddenly take up another."

It must be admitted—for even the most ardent lover of the birds should be honest—that some of the western lark's airs are odd rather than musical; but others are exceedingly sweet and melodious, almost bringing a shout of delighted surprise from an auditor. Some run very high in the scale, while others are tuned to a much lower key.

One evening in June I was rambling among the foothills near Colorado Springs, Colorado, when a western lark piped five different tunes of rare beauty and power in as many minutes, all of them delivered with an air which seemed to say, "There! I want you to know what I can do in the way of vocal gymnastics." If our bird is a little self-conscious, it does not in the least detract from his minstrelsy.

In another respect he differs from our eastern fluter. You are doubtless familiar with the eastern lark's sputtering alarm-call, which you may hear almost any time that you enter his precincts, especially if there are nests with eggs or young hidden somewhere in the grass. The tenant of the western plains does not "sputter;" instead, he utters a harsh *chack* very much like the protest of the crow blackbird. On several occasions I have heard one of these birds utter a loud, prolonged call which sounded almost like a wail.

The nesting habits of the two species are similar, the pretty crib being set on the ground, more or less carefully concealed in the grass, and often skillfully arched over from the rear.

One of the questions that has puzzled the scientists and caused some dispute among them is, whether the eastern and western forms are distinct species or only varieties. My own opinion is that they are entitled to the honor of being called distinct species, and that they do not mingle together in the marriage relation. Here are some reasons for this view:

First, as has been said, there is a striking difference in their songs. Much as I have listened to them, I am forced to say that the eastern larks almost always pipe the same tune, whether on a Kansas prairie or in an Ohio meadow. This is true even where the two species are descanting in the same field and at the same moment. On the other hand,



Photo by J. T. Little.

NEST AND EGGS OF WESTERN MEADOWLARK.

I have never known the western lark to steal or mimic the tune of his fellow-piper.

To the statement just made, honesty compels me to admit one apparent exception, which will appear from the following quotation from my Oklahoma notes: "The next morning shortly after daybreak a meadow lark burst into an aria that was new to me, neither the song of the eastern or the western type, but a kind of combination of the two; this for a few minutes, and then the merry piper glided into the piercing melody of a genuine 'down easterner.' Does this incident prove that the species sometimes get their songs confused, or that they purposely mimic each other? That problem remains to be solved by the future student."

However, with this one exception, I have never known the two species to borrow one another's music sheet.

In Oklahoma I made some effort to find out whether the two forms mingle together in the family relation. A dip in the prairie through which a small stream flowed was the haunt of a brilliant lyrist of the western variety. On my first ramble, both going and returning, I found him there piping his marvelous tunes. Afterwards I visited the spot four times, and on every occasion this bird announced his presence by singing his bright lays, proving—so it seemed to me—that he was the same individual and that this place was his special precinct. Other larks of the eastern kind were tenants of the same large field, but they seemed to avoid this particular locality, as if they recognized the fact that their cousin had established a prior claim.

Nor was this the only experiment of the kind I tried, and in every case conclusive proof was furnished that in the breeding season the two species keep well to their haunts, and do not often poach upon each other's presence.

That eminent authority on birds, Robert Ridgway, says that the western lark is "without much doubt a distinct species." He also speaks of the "excessive rarity of intermediate specimens"—that is, the peculiar forms which some bird students have thought were the offspring of the crossing of the two species.

It is interesting to note the ranges of these birds. On our western prairies both the eastern and western types dwell together in apparent harmony. As you go eastward, you will find the western form dwindling in numbers and becoming very rare in Illinois and Wisconsin, the eastern limits of their range. The precise reverse of this is true as you journey westward from the prairies to the arid plains. I have never seen or heard the eastern lark on the plains or among the foothills or in the mountain parks of Colorado, but in all these localities the westerners were found in great abundance.

Far out on the arid plains, in regions where rain seldom falls and where living streams are unknown, many of the lyrical western larks find breeding and feeding grounds. One cannot help wondering how they solve the problem of drinking and bathing, but they must solve it in some way.

However, the western larks are also found in goodly numbers on the irrigated portions of the plains and in the meadows that border the streams. Some of them make their summer homes on the parched mesas and among the rolling foothills. Do they also ascend into the mountains? Yes, in broad, open valleys, like the one in which Buena Vista is located, they rear their happy families and sing their loud

choruses all summer long. In July I found them quite plentiful in South Park, whose elevation above sea level is about 9,500 feet.

During the summer and autumn, after the breeding season is over, some of them move up to the regions above timber-line, an altitude of 11,000 feet and over, where they range about on the grassy, flower-decked slopes and acclivities and find insects to their taste. Then, as winter approaches, they descend to the plains, and, after tarrying there a while, most of them retire to a blander climate than Colorado affords, although a few remain to spend the winter on the plains and among the sheltering foothills. No birds lead a freer or more jubilant life than the meadow-larks, whether they dwell in an eastern pasture field, or on the stretching plains of the west, or in an elevated Rocky Mountain park.

LEANDER S. KEYSER.

BLUE-GRAY GNATCATCHER.

A. O. U. No. 751.

(*Polioptila caerulea*.)

RANGE.

Southern to middle portions of the Eastern U. S., south in winter to Cuba and the Bahamas; rarely found north to southern New England and west to California. Migration in Tennessee—April and September.

DESCRIPTION.

Length, about 4.5 inches.

Male.—Grayish blue on upper parts, gray shading into white below. Wings tipped with darker shade of gray. Outer tail quills white, gradually changing darker to black quills in centre. Slight band of black over eyes.

Female.—Same as male with colors less distinct, and without black marking on head.



NEST AND EGGS.

The nest of the Blue-Gray Gnatcatcher is placed on a horizontal limb or in a vertical fork at a distance ranging from 10 to 60 feet from the ground, and often appears to be a mere mossy knot. The typical nest is saddled to the limb with grace. The nest is a compact structure and a thing of beauty. It is three or four inches high, and with well defined walls and deeply cupped, being constructed of small grasses, hair, leaf-down and hempen fiber woven and interwoven into a compact mass. The exterior walls are beautifully decorated with lichens overlaid with spider and caterpillar webs. The favorite nesting site is in the hickory, pine, oak or elm tree.



BLUE-GRAY GNATCATCHER.



Photo by C. A. Smith.

NEST OF BLUE-GRAY GNATCATCHER.

The eggs are commonly four or five in number, though in two cases in the year 1890 I found sets near Athens, McMinn county, Tennessee, consisting of eight eggs each, and during the same year found a nest of seven young. The ground color of the egg is a pale blueish or greenish white, thickly speckled and spotted with brown and lilac, often forming a wreath around larger end. I found on May 3rd, near Chattanooga, Tennessee a set which were devoid of spots. The average size of eggs is about .56 x .43 inches.

HABITS.

The Blue-Gray Gnatcatcher, sometimes (erroneously) called Long-tailed Titmouse, is an abundant summer resident of the southern and middle states. In early spring, ere the swollen buds of the maple and poplar have well begun to burst, the woodland and orchards are well populated with this graceful little friend. The peculiar little note "chee-e chee chee-chee" interspersed with the low but sweet warble from the tree top and even low shrubbery announce the arrival from winter quarters. Soon after their arrival the happy pair will diligently set to work erecting their summer home. Their diligence often betrays them,



Photo by C. A. Smith.

NEST OF BLUE-GRAY GNATCATCHER.

for they are as busy as bees until the nest is completed. During the month of April, 1899 I found a great many nests of these birds near my home in Hamilton county, Tenn. On one day I found some twenty-nine pairs of this specie breeding.

The movements of this specie are quick and spirited. It will be seen whirling and darting in mid-air or among the branches of the trees in pursuit of the little insect which forms his daily diet. The long graceful tail adds much to the beauty of the bird and is no impediment, for wings and tail seem lost in one, as the little fellow is whirling in quest of its prey. The Blue-Gray Gnatcatcher suffers as perhaps no other bird of its section by the ravages of the Blue Jay, which devastate its little home devouring either eggs or well fledged young.

H. R. CALDWELL.



Address communications for this department to

MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

MY DEAR YOUNG FOLKS:

Our Roll of Honor this month shows that you have spent some of your time with our magazine during your vacation. I am afraid I confused some of you because I spelled phebe with five letters instead of six in the missing word puzzle for July. Though "phebe" and "phoebe" are both given in the Century dictionary, the latter seems to be the most familiar to our readers. Several gave pewit as the missing word which is another name for the same bird. Would you like a glimpse into our mail bag this month? It contained many nice letters from our little friends. Here is one from Kansas, in which Marjory Lester tells of the Blue Grosbeak, "which has a nest in a tree in our yard, it is made of wool and paper, lined with fine root fibers, the eggs are white tinted with blue, and are very pretty." Stanley Cobb has a tip-top record, which I doubt if many of you can beat. He writes "I have had very good luck this year in seeing birds, having seen in all about ninety-three different kinds, and found several nests which I have photographed, the rarest of which is a Scarlet Tanager's nest." Have any of our readers identified a hundred different birds this year? Stafford Francis has been watching the Chewinks upon the ground. "They jump on the leaves with both feet, then they kick out with both feet at once, and send them flying, then they look around for bugs and worms, and then scratch again." This month the wonderful migration to the Southland takes place, keep a sharp lookout, boys and girls, and you may see a part of the procession.

Your Friend,

MEG MERRYTHOUGHT.

HISTORY OF TIM.

Tim was a little helpless Crow when he was taken from the nest and brought home. We kept him in a little box and fed him on bread and milk. At first he would not open his mouth, but we would swing a cloth over his head, and he, thinking the mother had come, would open his mouth wide and we would drop in the bread. Soon he would eat all the bread and milk we would give him. After awhile he was able to walk, then we would take him from the box, and take him to walk. It would have made you laugh to see the funny little hops he took to keep up with us. We used to dig worms for him, and these he liked very much. Soon he became a strong handsome crow, and would take short flights through the orchard, always coming back when we called "Tim," but not always to be caught for he was shy and liked his liberty. In order to catch him, we would call him to a big rock that had a hollow in it, in which we would place an egg, then stand ready to put our hands on him.

One day we went to the flower garden and Tim came and perched on the fence close by. There was a lovely flower that we said was too pretty to pick, so we left it, and had only got into the house when Tim lit on the window sill with the flower in his bill, and looking very proud and wise. He was often busy turning over chips. One day I saw him rolling quite a large stick of wood, and watched him to see how he could do it. He would put his bill down to the ground under the stick and then open his mouth wide and over the stick would go. Tim had a trick of filling his mouth as full of corn as it would hold, then he would hide it and cover it over with a chip. One day he had dropped his mouthful and was off hunting for a chip. When he came back he found the old duck just gobbling the last of the corn. He dropped the chip, walked up to her and yanked two or three feathers out of her neck. Oh he was mad!

The first winter I kept him in a big box in the open chamber, and fed him on corn and bread, and fresh meat. He was active all the time. Nights he would busy himself carrying sticks and paper from one end of his box to the other. The next summer Tim was a lovely bird, so black and with such long wings. He did not fear the dog or hens then, but he loved to annoy the old duck, and when she would run for him he would fly on the fence and chatter at her. He could not talk, but he would mock the hens and was a noisy fellow. I would toss papers at him and he would dodge them, then take them and fly away. Well, Tim was a dear bird and we all liked him, and if I had cut his wings we should have him now, but I could not bear to do that so one day in December I let him out, and he flew over the barn then

came over my head and flew off through the orchard, and I never saw him afterwards that I know of. The next spring a crow came early in orchard close to the house, and it may have been Tim. And so I lost my dear, tame crow, but perhaps he is happier flying round with his mates.

HOPE ELLINGWOOD.

ROLL OF HONOR.—Henri Behotegny, Wooster, O.; Geneva May Bierly, N. Pittston, Pa.; Marjory Lester, Kingsley, Kans.; Chas. H. Rogers, Chesham, N. H.; Stafford Francis, Exeter, N. H.; Stanley Cobb, Milton, Mass.; Frank B. Clark, Jr. Glastonburg, Conn.

ANSWERS TO AUGUST PUZZLES.

PI, Parts of a Bird. 1, Crown. 2, Forehead. 3, Mandible. 4, Nape. 5, Throat. 6, Breast. 7, Primaries. 9, Wing Coverts. 10, Scapulars. 11, Wing. 12, Tail. 13, Lores. 15, Rump. (The printer thought he could improve this PI by the addition of the letter (c) in number two, and also omitting number 14.)

SUGGESTED BIRDS.

1, Cardinal. 2, Bunting. 3, Catbird. 4, Cowbird. 5, Eagle. 6, Kingbird. 7, Partridge. 8, Phoebe. 9, Railbird. 10, Swallow. 11, Whip-poor-will. 12, Thrasher.

NAMES OF BABES IN THE WOODS.

1, Yellow-throated Vireo. 2, Robin. 3, Chewink. 4, Thrasher. 5, Ovenbird. 6, Prairie Warbler. 7, Downy Woodpecker. 8, Scarlet Tanager. 9, Indigo Bunting. 10, Wood Thrush.

CHARADE.

My 1st grows long for three months hence. My 2nd is a preposition. My 3rd is unwelcome to sailors and bicyclists. My whole is one of the sweetest songsters.

CHARADE.

My 1st is a girl's name. My 2nd Columbus rejoiced at the sight of. My 3rd is not uncommon where there are boys. My 4th is a vowel. My 5th is used in producing my 3rd. My whole is a common bird.

THE ENGLISH SPARROW.

Although the English Sparrows are pretty little fellows, sociable and intelligent, they have few champions; there is a long black list against them. They drive away more desirable bird neighbors, take possession

of the houses provided for other birds, are untidy, quarrelsome, thievish, and even murderers.

A pair of English Sparrows in this neighborhood lost a good friend a few weeks ago, when they were seen to enter a Bluebird's box and bring out and kill the four young Bluebirds.

However, we are sorry to see the boys with air rifles destroying the little scamps, for oftentimes they are maimed, and the broken wing or leg causes suffering for a long time. Then too, many a bright hued bird has lost its mate through the carelessness, which mistook her for "only a sparrow." It is possible too, that all the little folks may not be familiar with a score of others of the sparrow tribe, whose habits and songs make them most desirable friends. We give a list of some birds in brown plumage which might be mistaken for this little English Sparrow. You will have to supply the vowels, as in some mysterious manner they have disappeared from the type. Sparrows:—Chppng. Fld. Fx. Grsshppr. pswch. Svnn. Ssd. Shrptld. Sng. Swmp' Tr. Vspr. Whtcrwnd. Wht-thrtd. Also the Gldfnc in winter dress, the females of the Bblnk, the Rd-wngd-Bckbrd, the Rd-pll, Prpl-fnc, ndg bntng, and the Grsbks.

A WALK IN JULY.

What a beautiful day! Now that Old Mother Nature (but in her gay attire she looks quite young and girlish) is arrayed in her prettiest garments, let us take a walk and admire them. Hush! what a beautiful Blue Jay just flew down to the walk in front of us, took a step and in a minute he was gone. Who would think that that bird with such gorgeous plumage could be so treacherous to his bird neighbors, but who are mostly all his enemies. See those dainty little asters, just the least bit tinted with blue. I will pick a few of them, while you pluck for your bouquet some of that—now what is the real name of this pretty yellow and orange flower—well call it the old fashioned name of butter and eggs. I am going to break off some of this tansy and pink and white clover,—why what makes you laugh? You think it is too common to pick? Ah! no, they are just as beautiful to me even though they are so common. Well, well, see that bold little English Sparrow bathing in the pool of water; now see him trying to dry himself in the dust.

It seems rather queer to me to go and dirty oneself just after getting clean. Torn your stocking in the blackberry vine. No. That's good. Hark! Do you hear that Catbird imitating our pussy at home? I'd like to have him come out of his hiding place, but as he is

bound not to, we wont say a word but go away and see what more we can find. Hear the Robin singing his song of cheerily, cheerily, cheerily, cheer up, cheerily. Who could be lonesome even if left alone with just this one bird friend. Not I at least. See the timothy grass in yonder field waving to and fro in the gentle breeze. Come run, there is a little snake, O, it is running away from us, it won't hurt you. You say you wouldn't like to be left with that small wriggling creature, well, I quite agree with you there. Chip, chip, hear that Chipping Sparrow overhead and see that swallow flying up and then down. He seems to be always on the wing. I should really think he would be tired. I'm just beginning to feel tired myself, aren't you? Well let us sit under this birch tree and enjoy the shade it gives. Do you feel the gentle breeze? How refreshing it is. See those two swallow-tailed butterflies. Be still and they may come near. Yes they are right at my feet. See how perfect each marking of black is. What is the use of these pretty flitting things? They have a use or our Heavenly Father would not have put them here. Their use may be just to make us think of Him. Do you hear Bob White telling us his name and the crow above saying caw, caw, caw? Let us be up and off. Just listen one minute and hear all the different sounds that come from the birds, the tree toad, and the rustling of the leaves for an accompaniment. See that Chickadee in the pine tree yonder, and Oh, see that beautiful Bluebird. It is the most beautiful one I have seen this year?

How kind Mother Nature is to show us all these things, and how kind of our own Heavenly Father to put them on earth so that all who would, could see them.

MARY F. W. ANDERSON, (age 14,) Wollaston, Mass.

GLEANINGS.

'Tis always morning somewhere; and above
The awakening continents, from shore to shore,
Somewhere the birds are singing ever more.

—LONGFELLOW.

KINGFISHER.

She rears her young on yonder tree,
She leaves her faithful mate to mind 'em,
Like us, for fish she sails to sea,
And plunging, shows us where to find 'em.

—ALEX GILSON.

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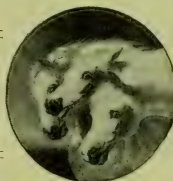
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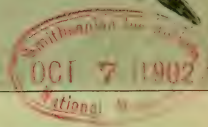
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DOUBLEDAY, PAGE & CO., Pub.

34 Union Square, East, New York.



Photo from life by Dr. J. B. Pardoe.
YOUNG BLUE JAYS.

BELTED KINGFISHER.

A. O. U. No. 390.

(Ceryle alcyon.)

RANGE.

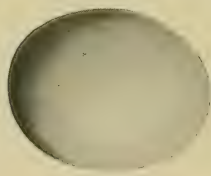
Found commonly throughout North America, from the Arctic Ocean to Central America. Breeds from the southern parts of the United States, northwards.

DESCRIPTION.

Length about 12 in.; extent, 22 in.; tail 4 in. Bill and feet, blackish. Eye, dark brown. Top of head, upper parts and band across the fore part of the breast a bluish slate color. Spot in front of, and crescent below the eye are white. A broad band around the upper part of the neck, including the chin is white, as are also the remainder of the under parts except the band of slate already mentioned. Primaries black, the outer ones being irregularly barred or mottled with white. Secondaries black, barred with white and with the outer webs for the greater part blue gray, these edges completely concealing the black when the wings are folded. Middle tail feathers gray; the next with the inner web black barred with white, these latter colors gradually replacing the gray until the outer feathers are entirely black and white. The female is similar to the male except that below the gray band across the chest is another one of chestnut which color extends along the sides also. The young of both sexes resemble the female.

NEST AND EGGS.

The Kingfisher builds its nest at the end of a tunnel in a bank. This tunnel varies in length from two to eight feet; the eggs are laid on the bare sand at the end of the burrow. The tunnel is dug by the bird and is used year after year. They lay from six to eight glossy white eggs.



HABITS.

A harsh, dismal rattling cry comes to our ears from some point up the lake. We listen and again it is repeated. We have ominous thoughts of riots, the officer's rattle and the death cry of some animal or human being, which are dispelled as an odd but handsome bird perches on a branch overhanging the water and utters the same peculiar



BELTED KINGFISHER.

rattle that had caused the misgivings. We watch him with much interest as his bright bead-like eyes keenly scan the depths of the lake below. Without an instant's warning we see a flash of gray and white darting downwards and the quiet surface of the water is ruffled as this king of fishers disappears beneath. Only an instant is he out of our sight and then with much splashing of water he emerges with a struggling fish held firmly in the grasp of his stout beak.



Photo by C. A. Reed.

HOME OF THE KINGFISHER.

Proceeding directly to his original perch, after shaking himself, he calmly turns the fish half way around; a convulsive movement of the head and the fish is seen no more, while the fisherman uttering another rasping rattle, his only attempt at a song, starts off for another hunting ground. The Kingfisher does not by any means confine his hunting to the comparatively inactive fish of the lakes and ponds but wanders up and down brooks where fishing is more difficult.

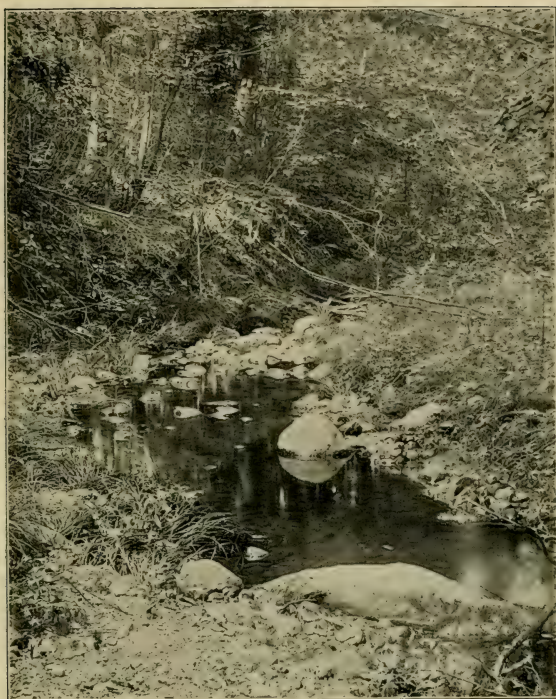


Photo by C. A. Reed.

A FAVORITE FISHING POOL.

The larger trout are fairly successful in avoiding the hooks of human anglers, but the smaller ones are not so fortunate in escaping the beak of this more adept feathered angler and he rarely misses his aim. For a good many years a pair of Kingfishers have made their home along the banks of a certain small stream within the limits of the city of Worcester. Here in the solitude of the woods through which the stream flows, they have regaled themselves on trout, dace, sunfish, etc. Now and again, amid the babel of the numerous smaller birds, the warning rattle of one of them will ring out either for conversation with his mate or as a cry of exultation over the capture of another finny creature. Their nest is in the bank under the roots of an overhanging oak. Doubtless if we could see the nest at the end of the tunnel we would

find, as is generally the case where the nest has been used for a number of years that it would be lined with the bones of fishes that the young had been fed upon.



Photo from life by J. B. Pardoe.

"LET GO MY WING."

Salt water rivers and bays prove just as attractive to these crested fishers as do inland waters and they are commonly found along the coast, where they fish for the smaller fry near shore, leaving to the Ospreys the duty of catching the larger ones. Their vision is so keen that though the surface of the water may be ruffled so that a person can



Photo from life by J. B. Pardoe.

YOUNG KINGFISHERS.

see nothing in it, they will catch their fish every time. Along the sea coast they are often seen perched on the masts or shrouds of schooners or smaller craft that may be at anchor near shore. Another familiar spectacle is that of a Kingfisher hovering in mid air over the water, motionless except for the rapidly vibrating wings, watching for a fish below to get in the proper position for him to make a successful plunge.

Owing to their non-economic value and the small damage they do by the killing of young trout, sportsmen and fishermen are advocating the removal of the law that now gives them protection and favor killing them all off. Anyone that will advocate such a method shows that he has little appreciation of the beautiful and no ingenuity of his own or he would find an original method by which he could keep them away from hatcheries without injury to the birds.



Photo from life by J. B. Pardoe.

ON GUARD.

ROSE-BREADED GROSBEAK.

A. O. U. No. 595.

(*Halia ludoviciana*.)

RANGE.

Eastern North America, breeding from the middle states northwards to Labrador and the Saskatchewan. Winters in Mexico and Central America. It has also been found in Ecuador and Cuba.

DESCRIPTION.

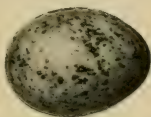
About 8 inches long; the male has the head, neck and upper parts black; bill, rump, under parts, and markings on the wings and tail,



ROSE-BREASTED GROSBEAK.

white; breast, rose-carmine; lining of the under wing, delicate rose. The female has the upper parts a light brown streaked with darker; a line over the eye, a slight one below it and one of the middle of the crown, tips of the wing coverts, and under parts, white; breast and sides streaked and spotted with brown; bright yellow under the wings, and sometimes a tinge of the same on the upper part of the breast. I have also seen a rose tint mixed with the yellow under the wings, and also a male with the most delicate tint of pink on the rump.

NEST AND EGGS.



The nest of this species, built late in May, is a frail and loosely woven affair, placed in the top of a bush or on the lower horizontal limb of a tree. It is composed outside of small sticks, twigs, or coarse



strawy material, ornamented with a few skeleton leaves, and is lined with very fine dry twigs of some evergreen tree, or with fine rootlets, and is sometimes finished with horsehair. The whole structure is so loosely put together that one can see through it from below. The eggs which number four or five, are light greenish blue, speckled and spotted with brown and lilac, the markings often thickened or wreathed about the larger end. The nest and eggs strongly resemble those of the Scarlet Tanager, both being a sort of rude log cabin sort of affair for birds of such "distant and high bred ways."

HABITS.

The stranger to our beautiful forests and sylvan retreats will scarcely know this charming bird, for its favorite haunts are the swampy woods where the shadows are deep from tangled vines and rank undergrowth; where blossoms are large and deeply tinted from vegetable molds, and where the fragrant atmosphere is cool and moist. It delights in thickets forming a border line between field and forest, and startles the echoes in the lofty arcades of the densest and darkest woodlands. In such places and rather local in its distribution, the male makes his appearance in western New York from the first to the tenth of May, and stretching himself on tiptoe, delivers, in a hurried and spirited manner, his rare and delightful melody, which strongly resembles the finest performance of the Robin—only the warble is much more copious, continuously prolonged and finely modulated with a peculiar richness, purity, and sweet pathos in the tones.



FEMALE GROSBEAK.

All his movements are stately and graceful, and his jet black with snow-white markings and rose on the breast render him a strikingly beautiful object among the bright young foliage of early spring; but so shy and retiring is he at nearly all times, as to be much more frequently heard than seen. Indeed it often requires careful observation to obtain a glimpse of him. He has been in favor as a cage bird and is said by some to sing freely in the night. The male seems quite attentive to the duties of incubation. I have seen him more frequently on the nest than the female.

In early autumn as the young males go south, they resemble the females in color and markings, only they are much darker and richer in tints and are tinged with rose on the throat, crown and under the wings. A family well represented at this time of year would make a truly beautiful group. Though closely related to the Sparrows and Finches, and therefore a seed eating bird in structure, he nevertheless devours multitudes of insects.

REV. J. H. LANGILLE.

A FEW OF MY FRIENDS.



OW pleasant it is to recall the delightful experiences of our summer ramble! While walking through a pine forest one morning in the latter part of June, it was my fortune to come upon the nest of an Ovenbird, placed in a hollow stump. There it was most deftly concealed and I never should have found it had the little mother remained in the nest. When one comes upon this bird by surprise as she is sitting in her little home, she will suddenly dart out and try to lead you away from the treasures that she loves so well. This nest contained four eggs and a few days later, four young birds that were as helpless as any living creatures could be. It was not long before they began to feather and I must say that I never saw so good a case of what ornithologists call protective coloration.

But alas. This nest as well as too many others that I found came to a sad end. One day I went to pay them my usual visit and found nothing there, neither nest or birds. Something had torn the nest to atoms,

and what became of the birds I cannot say. What or who the robber was, I do not know, but I do know that these tragedies occur all too frequently in my locality.

I must say something about that noted songster of the south, the Mocking Bird. Only today I found a nest of this member of the thrush family. They often build their homes near my residence and here they sing throughout the nesting season. This bird seems to me to be the most graceful of all our songsters. He mounts upwards to some tree top with an ease and grace that is all his own, all the while imitating the notes of some nearby bird who, I should think would feel ashamed to be outdone by this winner of the laurel—the Mocking Bird. I have often heard them singing in the quiet night. Then it seems that he sings with a sweetness that is rarely equalled by any other bird. There are many other birds that I frequently see in my rambles; among them I might mention the Red-headed Woodpecker, Cardinal, Summer Redbird, various sparrows, Thrushes and the like.

My favorite of all the birds is the Wood Thrush. Last season a pair of them built their nest near a country homestead where I was stopping and I had ample opportunity for observing their winning ways. Very frequently the male would sing in the locusts and oaks near the door. What a thrilling musical tone he has. Every time I hear his song it has some new attraction.

CLEMENT S. BRYAN.

GLEANINGS.

Then the little Hiawatha
Learned of every bird its language.
Learned their names and all their secrets,
How they built their nests in summer,
Where they hid themselves in winter.
And the birds sang round him, o'er him,
"Do not shoot us, Hiawatha."
Sang the Opechee, the Robin,
Sang the Bluebird, the Owaissa,
"Do not shoot us, Hiawatha."

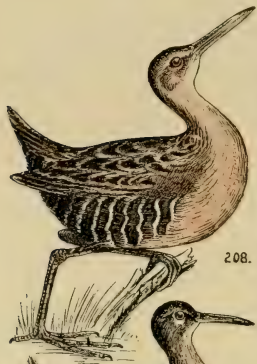
—LONGFELLOW.

So the struck eagle, stretched upon the plain
No more through rolling clouds to soar again,
Viewed his own feather on the fatal dart
And winged the shaft that quivered in his heart.

—Byron.

Identification Chart No. 9.

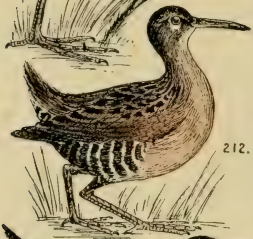
Rails.

No. 208. King Rail, (*Rallus elegans*.)

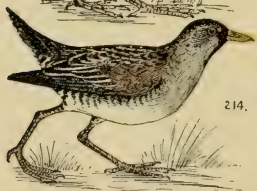
Found in the fresh water marshes of eastern U. S. North to the border of the U. S. Length 18 inches. Above, streaked with black and tawny brown, the central portions of each feather being the darkest. Back of head and neck brown. Wing coverts, rich chestnut. Throat and chin white. Sides of head, neck, breast and below, a rich reddish brown. Flanks and lining of wings blackish brown, barred with white. Eye, bill, and feet, brownish.

No. 212. Virginia Rail, (*Rallus virginianus*.)

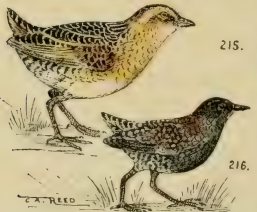
208. North America to the British Provinces. Length, 10 inches. Very similar in coloration to the last species except in the matter of size, averaging perhaps a trifle darker

No. 214. Sora Rail, (*Porzana carolina*.)

212. Found in temperate North America, but less commonly on the Pacific coast. Length, 9 in. Above, olive brown, streaked with black and white, the latter also in specks. Face and middle of throat, black. Remainder of throat, breast, and a line over the eye, gray. Sides and flanks faintly barred with black. Young birds lack the black face, the throat is white and the breast brownish.

No. 215. Yellow Rail, (*Porzana noveboracensis*.)

214. North America from the Atlantic to the Pacific. North to Hudson Bay and Nova Scotia. Length, 6 inches. Above streaked with black and yellowish brown and marked with numerous curved bars of white. Under parts pale brownish yellow. Flanks barred with white and black.

No. 216. Black Rail, (*Porzana jamaicensis*.)

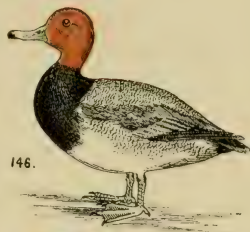
215. Found in temperate North America from the Atlantic to the Pacific, south of the Canadian border. Length, 5.5 inches. Above, black finely spotted and barred with white. Hind, neck and upper part of back dark chestnut. Head and under parts, dark slate color. Flanks and under tail coverts barred with white. The female is paler below and quite whitish on the throat

No 216, 1. Farallone Black Rail (*Porzana coturniculus*.)

216. Is much like the last, perhaps a trifle smaller and with few specks of white on the back. It is limited to the Farallone Islands off the coast of California.

Ducks.**No. 146. Redhead, (*Aythya americana*.)**

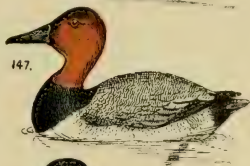
Entire North America breeding from the northern tier of states northwards. Length, about 19.5 inches. Male;—Bill, legs, and feet, grayish blue, the former with a black band across the tip. Iris orange. Lower neck, upper parts of the back, chest, rump, upper and lower tail coverts, black. Back, scapulars, and sides grayish white, finely barred with black. Wing coverts and speculum ash gray, the latter bordered above with black and below with white. Bill, broadest at the tip and at the base taking an abrupt upward turn forming a very different angle to that of the Canvas-back. Female;—Head and neck, brownish, shading to whitish on the chin and throat. Back, grayish brown. Wing coverts and secondaries pearly gray. Chest and flanks grayish brown.



146.

No. 147. Canvas-back, (*Aythya vallisneria*.)

Whole of North America, breeding north of U. S. except in the west. Length, 20 inches. Bill, black. Eye, red. Legs and feet, dark brownish. Top of head and chin, black. Rest of head and neck reddish brown. Upper back, chest, rump, upper and lower tail coverts, black. Rest of upper and lower parts white, finely waved on the back and sides with black. Bill slopes very gradually from the top of head. Female;—Head, neck, chest and upper back, brownish. Rest of upper parts dark brown slightly barred with ashy white. Wing coverts ashy. Under parts white.



147.

No. 148. American Scaup Duck, (*Aythya marila nearctica*.)

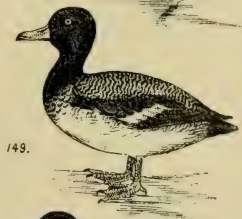
Length, 19 inches. Head and neck (with green reflection), forepart of back, chest, rump, upper and lower tail coverts, black. Back, sides and flanks, white, finely waved with black. Wing coverts blackish. Speculum, white. Primaries, dark brown. Under parts white. Bill, blue gray. Eye, yellow. Legs and feet, brown. Female;—With the exception of a whitish forehead, the entire head, neck, breast, and upper parts are brown. Feathers on the back slightly barred with white. Wings brown with a white speculum. Belly white.



148.

No. 149. Lesser Scaup, (*Aythya affinis*.)

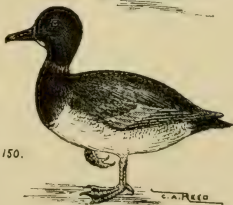
Whole of North America. Length, about 16 inches. The male differs from the former in being smaller and having purple reflections on his black head. Practically no difference except in size between this and the last female.



149.

No. 150. Ring-necked Duck, (*Aythya collaris*.)

Entire N. A. Length, 17 inches. Somewhat similar to the last two varieties. A triangular patch of white on the throat, and a reddish brown collar around the neck. Head glossed with purple, and back, black, glossed with green. Speculum, gray. Under parts white. Bill, black, with the edges, base, and band near the tip, bluish white. Female;—Top of head, back of neck, back and wings, dark brown. Forehead, eyelids, chin, throat and neck in front yellowish white, Speculum, gray. Rump, black. Tail and upper coverts and breast brown, the feathers tipped with yellowish. Under parts white.



150.

AMERICAN REDSTART.

A. O. U. No. 687.

(Setophaga ruticilla.)

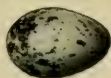
RANGE.

Entire North America south of middle Canada. It is more abundant in the middle and eastern portions and is only found casually in California. Breeds from the middle United States northwards, and winters in Cuba, Mexico and Central America.

DESCRIPTION.

Length, 5.5 in.; extent, 8 in.; tail, 2.5 in. Bill and feet, black. Eye, brown. Male:—Entire head, neck, and upper parts, a rich glossy blue-black. Remainder of under parts, white except the sides and under lining of the wings, which are a bright orange flame color. A band across the outer tail feathers and another across the wing formed by the basal portions of the quill feathers are of the same color.

Female:—The black of the upper parts of the male is replaced with an olive gray rather more ashy on the crown, and the white of the under parts includes also the chin, throat and breast. The bright orange of the male is on the female a rich yellow. Eye lids and a stripe in front of the eye, are whitish. Young males resemble the female and do not gain their fullest plumage until the third year, the black gradually appearing upon them in patches.



NEST AND EGGS.

Redstarts build a beautiful and substantial nest of shreds of plants and spiders webs and line it skillfully with fine grasses and hair. This they sometimes saddle on a limb but much more often secure in a crotch of some bush or small tree at heights varying from four to twenty feet. They lay four or five pinkish white eggs which are rather more elongated than those of the Yellow Warbler. These are marked more thickly about the larger end with spots and specks of different shades of brown and gray.

HABITS

This warbler is small but he is very much in evidence wherever found because of his striking coloration, vivacious manners, and often repeated high-pitched song, if the rapid repetition of a single syllable may be designated as such. Although uncommon on the Pacific coast, this warbler is to be noted as one of the very few whose range extends across the Continent. Their more common habits may be found in the following account:



Photo from life by C. A. Reed.
FEMALE REDSTART.

A FAMILY OF REDSTARTS.



HE morning of June second found me threading my way along a narrow foot path that wound its way in and out through one of the most delightful pieces of woodland that ever a bird sang within. As I walked slowly along, I was separating, by their voices, the many varieties of birds whose babble was filling the woods with melody. A brisk, familiar "Chee-chee-chee" close beside me is evidence that a Redstart is busily engaged at his work. I instinctively part the bushes and catch a glimpse of him in the act of tearing fragments from a caterpillar's nest. This material he carried across the path to a small maple

about twenty feet from me, and wound it about the framework of a nest that the two birds were just building. Before he left, his less gaudy mate appeared with a like load, which she carefully and skillfully wove in the growing home. Seated under the shade of a young tree not more than six or eight feet distant, I watched the nest building operation for the following two hours, and learned a great deal about the temperaments of these particular birds.

The male was one of the brightest of Redstarts that I have ever seen. He was very proud and conceited too. His mate too was fully as beautiful.

Undoubtedly she knew more about house-building than he, although she could not convince him, and whenever she objected to his manner of doing the work, he promptly drove her away with seemingly savage, yet playful snapping of his beak. They were exceedingly active in all their movements, and the way they would dodge around trees, over and under the brush, taxed my eyes to follow their movements. In the end, as is generally the case, she had her way about everything, for as soon as his back was turned to go on another journey after building material, she would set to work to arrange everything as she wished. Naturally, with so much play, the nest grew very slowly and it was over a week from the time I first saw them before the first egg was laid.

A week later the nest contained four possibilities of future Redstarts



Photo from life by C. A. Reed.

MALE REDSTART FEEDING HIS YOUNG.

[This is the same nest as shown in the previous photos, but is taken from another quarter.]

and I decided it was time for me to act if I wished any record of this nest, as I knew from experience the sad results that are very apt to occur should a nest be found by certain beasts, birds, or boys. With little difficulty I secured a good likeness of the female as she was about to descend to the eggs. The male bird at this time was literally "out of a job" for I never saw him assist her in the duties of incubation and only once did I see him feed her while she was on the nest. Most of his time appeared to be spent in the tops of the taller trees catching insects and driving away all other small birds that came anywhere near him.

With the advent of the young birds came an end to his period of loafing and he did his duty manfully and with a great deal of enthusiasm. On an average of about once in every five minutes, one or the other of the parent birds came to the nest with a load of provisions with which to fill four gaping yellow mouths.

The actions of the two adult birds proved to be entirely different in the presence of the camera. The male showed a disdain for it that was amusing. I placed the outfit in position while he was off foraging and had my head under the focussing cloth, when I felt a rush of air, a

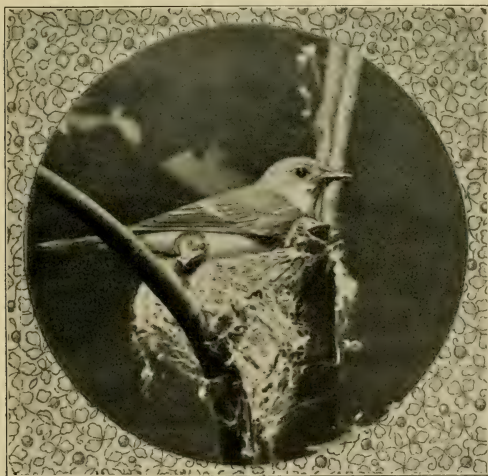


Photo from life by C. A. Reed.

BROODING HER YOUNG.

bright streak flashed across the ground glass, and the next instant the male Redstart was bending over his eager children. How I longed to reproduce the picture that I saw on the glass as he fed them in turn, his wings quivering in his enthusiasm and his tail opening and shutting like a fan. At no time did he appear afraid but he never became familiar. The female was rather timid at first and approached the nest cautiously until we had been acquainted several days. Then she became very confiding and was continually searching for food close by, a number of times perching on my shoe while she carefully scrutinized me to see if I meant harm. They had a very bright quartet of youngsters and when they were a week old their curiosity was fully developed. They had the faintest suspicion of feathers on them, and when their parents were foraging, their bald heads would be hanging over the edges of the nest in a seemingly lifeless manner, but by watching closely it could be seen that their half open eyes took in everything that was going on about them. That young birds are sometimes naughty is shown by the illustration of the female attempting to brood her young. She kept turning this way and that in the endeavor to keep them all under her, but they would persist in poking their heads up to see what was going on. The one on the right really looks as though he were laughing at her vain attempts to control him.

The nest which is plenty large enough for the full set of eggs and the young in the early stage, is shown by the last photograph in this series to be far too small for them as they grow older. We cannot but pity the poor little fellow that is vainly trying to push his way up from the bottom of the heap, but we can rest assured that when it comes his turn to dine, even if he has not succeeded in forcing his way to a more comfortable position, he will not be forgotten. At no time while I was watching them, did I see the old birds feed them large insects and moths such as many of the smaller birds frequently do. Their food was made up entirely of small insects and various worms.

PRAIRIE HEN.

A. O. U. No. 305.

(*Tympanuchus americanus*.)

RANGE.

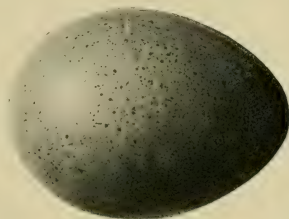
Common on the prairies throughout the Mississippi Valley. Formerly they ranged throughout eastern United States but they have been gradually forced back to their present habitat. Their range is limited on the north to Wisconsin and on the south to Texas and Louisiana.

DESCRIPTION.

Length from 16 to 18 in.; the males being the largest; extent, about 28 in.; tail, 4.5 in. Eye, bill, and feet, brownish. Upper parts variegated with black, tawny, brown and white. Under parts regularly barred with brown and white. Throat and legs, which are feathered to the toes, tawny. Tail, blackish-brown and terminating in a narrow edge of white. A lengthened tuft of feathers varying from two to three and a half in. long, project from either side of the neck. These are black, mottled towards the tips with brown and tawny. These feathers on the female are much shorter and sometimes hardly noticeable.

NEST AND EGGS.

The nest is placed on the ground under a bush or at the foot of a thick clump of prairie grass. It is only a slight hollow in the earth, lined with a few dead leaves and feathers. They commence laying about the last of April. A full set may contain from eight to sixteen eggs, although they rarely exceed twelve in number. These are of a buff or pale olive green color and are sometimes sprinkled with brown.



HABITS.

A good many years ago, Prairie Chickens or Pinnated Grouse were found in abundance from the Atlantic Coast to the Rocky Mountains, but from various causes they have been gradually forced to limit their range till they have made a final stand on the prairies of the Mississippi Valley. To all appearances now, they will be able to hold their own in this section. Even now during the winter months large numbers of them come east to visit the homes of their ancestors. They come not as living birds but as inanimate bits of frozen flesh covered with feathers, and are displayed by hundreds in all the markets. They form a carpet for the windows, and strings of them decorate the store fronts. It does seem wonderful, with the thousands upon thousands of them that are shot every fall, that there should be a single bird left alive. When hunted with a dog, they are said to lie close and flush two or three at a time, giving the hunter an opportunity to load between times,



PRAIRIE HEN.

so that he can secure the whole flock and then lament that there were not more that he could kill.

In the spring, Prairie Hens are found in large flocks preparatory to breaking up into pairs for the summer. At this season the booming of the males may be heard every morning. Underneath the tufts of feathers or pinnates that adorn the sides of their neck, is a small sack which the bird inflates to about the size, and this appendage is about the color of a small orange. When the air is forced out of this sac it produces a booming sound not unlike the low notes of a powerful organ. Mr. A. K. Boyles writes that he has seen them when they were in the midst of their mating performances. He constructed a blind of grass mounted on two wheels, which contrivance he pushed into a flock of booming chickens. Some forty birds took part in this ceremony. The hens were grouped on both sides and watched the exhibition with great interest and admiration. Two of the male birds would take their positions at about twenty feet apart, and suddenly, with pinnates extended and the sacs filled to their limit, would rush towards each other, at the same time giving their booming note.

Just at the instant that you would expect to see them crash into each other, one of them would leap into the air and the other pass safely under him. The strangest part of the proceeding was that they seemed to have some understanding before the rush so that each would know which was to jump and thus avoid the collision that would be inevitable should any mistake occur. All the males in turn would go through the same performance and rush between the lines of their admirers.

Every morning for about a week this exhibition is given. By this time all the females have selected their partners. Now comes the time when these contests, which up to now have been mere exhibitions, become a reality. There are generally a few of the males that are left without mates. These attempt to purloin those of some of the successful ones and the fight is on in earnest. Generally no harm is done other than the loss of a few feathers and possibly, injury to the feeling of the vanquished one. Having settled down to a peaceable domestic life, they select a suitable clump of grass under which to build their home. The young chicks, like those of all the game birds are very lively and as soon as hatched it is a difficult matter to catch them.

As soon as the young are able to fly, all the broods in the vicinity together with the old birds form into a large band, sometimes numbering three or four hundred individuals. In this way they pass the winter and if the weather is too cold the greater part of the young and females migrate to the southwards.



DEAR YOUNG FOLKS:

Probably some of you have seen persons or animals that are called albinos, because of the lack of certain coloring matter beneath the skin; one of Waterbury's bird-lovers made the acquaintance of an albino robin last summer. The bird's breast was red, but there were large patches of white upon the back and outer tail feathers, while its bill and eyes were pink. When the robin moulted in the fall it donned the natural colors worn by its mates. The same lady told of another robin which wore an overcoat of glossy black instead of rusty gray.

A number of years ago we were visited by a white robin for two summers. Perhaps some of our little readers can tell us of some such ghostly visitors which they have had.

It was great fun to watch some birds taking their bath the other morning, they seemed to enjoy the cold plunge, and splashing, and then what a long time it took to get every feather smoothed and cared for. You,—Madge Curlylocks—think it takes a long time to get the tangles from your hair, but these little fellows have a greater task. You have often seen puss wash her face and comb her hair with her paw, but what do the birds do for a comb and brush? It has only its tiny bill, and did you know that each one of these little feathered folk uses hair oil; and carries a supply in a little gland at the root of the tail, with which he dresses his feathers?

Our Roll of Honor has but three names this month. Perhaps the puzzles have grown a little harder, or was it because August was the last vacation month, and time was too precious to spend on puzzles? The September puzzles were still harder, but I am sure you will succeed in finding the answers to some of them.

Your Friend,

MEG MERRYTHOUGHT.

ANSWERS TO SEPTEMBER PUZZLES.

Charade 1. Nightingale. Charade 2. Maryland Yellow-throat.

Birds resembling English Sparrows in coloring. Sparrows, Chipping, Field, Fox, Grasshopper, Ipswich, Savanna, Seaside, Sharp-tailed, Song, Swamp, Tree, Vesper, White-crowned, White-throated, the Goldfinch in winter plumage, also the females of the Bobolink, the Red-winged Blackbird, the Red-poll, Purple Finch, Indigo Bunting, and the Grosbeaks,

ROLL OF HONOR.—Irene Williams, Platteville, Wis.; N. Pearl Heath, Grand Forks, N. D.; Stafford Francis, Exeter, N. H.

PREACHER OR YELLOW JOURNALIST, WHICH?

Have you ever been to a corn roast? If you have not, you have missed a deal of fun. First, you find a grassy slope where the sunshine sifts down between the quivering leaves of tall trees upon the gay flowers and feathery ferns which nod by the brook, for of course there must be a brook, to furnish music as it ripples along over the



REDEYED VIREO.
(Preacher Bird)

Photo from Life.

treacherous stones which roll you splash, into the water as you essay to cross on them. Then within a circle of stones you build a fire of charcoal, (if you can build it within the fairy's mushroom, 'twill bring you good luck.) Over the glowing coals hold the milky ears of corn, pierced to the heart by sharp-pointed wooden bayonet toasters. What an appetizing odor! If you never cared for corn before you will enjoy it now, and the striped chipmunks and chattering squirrels will enjoy their share too, while the birds overhead fly back and forth, and wonder what the stir in their woods is all about.

This is what we did on one delightful August day. When the feast was over we buried a bag of charcoal which had not been needed, among the leaves at the base of a birch sapling, to use at some other outing should it remain undisturbed. But this is not the story I started to tell you. What I want to tell you is of the notice which a little olive green bird posted in our picnic grounds of a year ago. Jack Frost visited the green wood, Winter wrapped soft white blankets about it, and the earth was newly dressed in fresh green robes, ere we passed that way again. We stopped at our old camp. The coal was gone. But what do you suppose we found. From a slender forked branch of the tiny birch which stood guard over our buried treasure, swung the deserted gray nest of a "preacher" bird—the Red-eyed Vireo, with its fibers of bark, cobwebs, moss, leaves and grass, and with the usual literary instincts of the Vireo family, bits of newspaper were daintily interwoven with the fabric of the swaying cup. However the bird had not gone without leaving a message for us. On a bit of paper securely fastened into the bottom of the nest was printed in large letters,—"DONE IN FIRST CLASS"—and turning the nest over, this is what we read upon a piece which decorated the side—that—Harbor—that on May 27th supply of coal was taken—there were about forty tons.

NUMERICAL ENIGMA.

Boys take a 5-2-3 and get some 7, 6, 5, 7, 6, 3, 1, from the orchard, for your 4, 8, 2, 9, mother to 7, 2, 9, 8, for some 5, 6, 8, 1, then when the mail 2, 7, 5, 8, 2, 9, 1, you can go down by the brook and perhaps you will see a 1, 2, 3, 4, 5, 6, 7, 8, 9, getting its breakfast.

My 1st is in drowned, and also in rain.

My 2nd is found in every green lane,

My 3rd is in wave, but never in flag.

My 4th is in brave, but not once in brag.

My 5th is in snake. Now place them aright,

These five letters spell a bird black as night.

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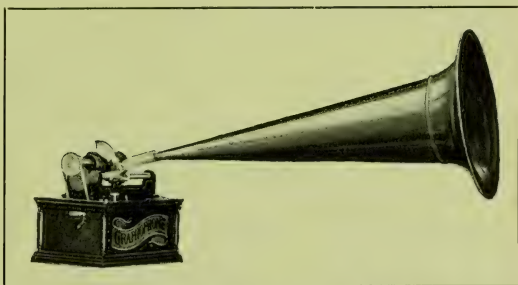
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Photo by C. A. Smith.

NEST AND EGGS OF RED-EYED VIREO.

RED-EYED VIREO.

A. O. U. No. 624.

(Vireo olivaceus.)

RANGE.

Found throughout North America, east of the Rockies and from the arctic regions south. Breeds throughout its range.

DESCRIPTION.

Length, 6 in.; extent, 10 in.; tail, 2.5 in. Eyes reddish brown. Bill dark above and lighter below. Feet grayish. Upper parts olive green. Crown grayish with a blackish stripe on either side. A white stripe extends over the eye and a dusky one from the bill through the eye. The under parts are white, tinged with yellowish green on the sides and under tail coverts. Wings and tail dusky, the outer edges of the feathers being olive.

NEST AND EGGS.



The Red-eyed builds a beautiful substantial basket like nest, which is suspended from the fork of a tree or bush and is generally located from one to ten feet from the ground. The outside of the nest is skillfully woven with vegetable fibres, bark, and sometimes bits of paper and twine. It is lined with fine grasses and horsehair. The three or four eggs are laid during May or June and are white with a few specks of reddish-brown around the larger end.

THE HOME LIFE OF A VIREO.



RINGING with them the good cheer of the South, the Red-eyed Vireos reach the northern boundary of the United States about the middle of May. From morning till night, regardless of the weather, they pour forth song after song, and seem to be the most independent, happy-go-lucky fellows of the bird world. Business seems a pleasure to them and all day long they clamber



Fig. 1.

Photo from life by C. A. Reed

A COMFORTABLE HOME.

[June 18, Cloudy. 1-25 Sec. f. 4.]

about among the leaves freeing the trees from vermin and singing all the while. Very painstaking about their work they are, and every portion of the leaves is carefully searched both above and below, and the attitudes they assume are ridiculous in the extreme. Woodland composed of large trees rather than the smaller growths seems to be preferred, probably because of the greater abundance of their desired food. They are not in the least afraid of mankind or modern improvements, and are frequently heard about the houses even in large cities wherever there are large trees. Their song might be likened to a whistling interpretation of the word "Vireo," this being continually repeated with countless variations as to accent and syllables. For hours at a time this music is heard with only short pauses when the bird stops to take breath or to swallow a morsel that he has found. I know of no other bird than the Vireos who are such persistent songsters. Whatever they are doing has to be done in time to the music. I have often seen one of them hanging head down from the under side of a branch and looking over the under surfaces of the leaves, but still singing as sweetly as though in a normal position.

However welcome their song may be in some gloomy piece of woods, deserted by all the other birds, it becomes quite monotonous at times, and often upsets the equanimity of the observer who is earnestly trying to locate or identify some unknown species of bird by his song.

Aside from their noise, Red-eyed Vireos are rather quiet mannered birds and seem to be slow to anger, but when they do get aroused they go at their opponent with a vim, and utter a harsh screech which generally puts him to flight at the first onslaught.

During the two weeks following June 10th of this year, I had a very pleasant acquaintance with an unusually bright pair of Vireos. It was on that date that I first saw their nest. It then contained four eggs. This nest was discovered by seeing one of the birds fly past with a piece of paper in its bill. I followed and was just in time to see the Vireo carefully weaving it into the outside structure to repair some point that did not just suit them.

They had chosen for their summer residence, one of the prettiest places ever selected by a pair of Vireos. It was in a pleasant piece of woods overlooking Lake Quinsagamond. Not only were their natural surroundings pleasant, but they had congenial neighbors too. This latter fact added a great deal to my pleasure in the scene. Sitting under the shade of a giant chestnut tree within ten feet of the Vireos nest, I could plainly see with my glass all that transpired at the nest of the Redstart that was shown last month. Within about six feet of and behind me was the nest of an Ovenbird, and the owner of that domicile



Fig. 2.

Photo from life by C. A. Reed.

ALWAYS HUNGRY.

[June 18, Cloudy. 1-100 sec. f 4.]

chattered and scolded a great deal over my presence. Undoubtedly you would also be interested in a number of other neighbors who had taken up their homes within one hundred yards of that of these Vireos. In a tangle of blackberry vines just beside the path where it enters the woods was a Catbirds nest occupied by four greenish eggs. These birds were always the first to greet me when I came. Their notes of warning were generally followed by a resonant thrilling whistle and I knew that the Wood Thrush was still there. His nest was located in the alders overhanging the bed of a small brook.



Fig. 3.

Photo from life.

THIS OUGHT TO KEEP THEM QUIET.

[Taken June 19. Bright sunlight. 1-100 Sec, f. 8.]

A few yards farther on was the nest of a pretty Chestnut-sided Warbler. It was artfully hidden in the top of a small oak bush about three feet from the ground. She was not timid in the least and nearly always as I went by I would lift the leaf that hid her from view to catch a glimpse of the bright little eyes watching me from under a crown of gold. Sometimes she would even allow me to stroke her back. Half a dozen White-breasted Nuthatches were playfully chasing one another up and down and around the tree trunks. They were mostly young birds who had recently graduated from their nest, which was in a hollow branch of the chestnut tree directly over the Vireo. Down in the

hollow on the other side of the hill were the nests of a Towhee, Brown Thrasher, Wilson's Thrush, Indigo Bunting, and Prairie Warbler, 'all within a square of not more than twenty-five feet.



Fig. 4.

Photo from life.

FOOLED THE CAMERA THIS TIME.

Amid these surroundings you can imagine that I was not lonesome at any time. But to get back to our Vireo. The eggs were well incubated and she sat very closely to them. From time to time the male bird brought her food so that she did not have to leave. I have said that these were a very bright pair of Vireos. An examination of the illustration will show why. In Fig. 1, you will notice the easy comfortable position that the bird has assumed. Fig. 2 shows the contour of the rim of the nest to better advantage; notice the sag in the rim between the points where it is joined to the branch. This allows her tail to project over the rim and the long V shape of the opposite end of the nest gives ample room for her to sit in a perfectly natural position. Compare her position with that of the bird in Fig. 6. This one was obliged to sit with her head thrown back and tail in an upright position. She does not look nearly as comfortable as her neighbor, for these birds are neighbors too, their homes being not more than four hundred feet apart.

Three days after I found the nest, the eggs hatched and when the young were five days old I first used the camera in connection with these Vireos. When I placed the camera in position, the female was brooding her young and the male was standing on the back edge of the

nest. What a picture they would make if I could but get in readiness before they flew off. But, no. It was not to be. Just as I was drawing the slide, off they went and not another opportunity did I get to take them at the nest together. On this day, June 18th, I had the nest under observation from 10 a. m., until 1 o'clock, and during that time the young were fed with clock like precision, beginning within less than ten minutes after I had placed the camera and retired. The longest period during which the adults were absent was seven minutes and



Fig. 5.

Photo from life by C. A. Reed.

ENTERING BY THE BACK DOOR.

the shortest two minutes. However their time of absence generally varied but a few seconds from five minutes, and the two birds either arrived together or within a minute of each other. One would always wait on the nest branch just out of the field of view of the camera, while the other fed the young, and immediately hop to the nest when the other flew away. They fed them chiefly on various worms and caterpillars, varied occasionally with dragon flies and small moths. During the three hours I made four exposures to illustrate various attitudes, but only two of them were good owing to rapid movement of the young. Fig. 2 shows a number of interesting points. Notice how the male has his bill thrust down the young bird's throat. This is the

manner in which nearly all birds feed their young, but it is a difficult situation to photograph as both the old and young are generally rapidly moving at this instant. We see too that the fortunate young Vireo that is being fed also has his head raised higher than his companions. It is a fact that I have noticed in nearly all cases that I have observed, that the young whose turn it is to be fed next will have his head the highest.

See the little fellow in front. What a supplicant expression he has. I should judge that he was two or three days younger than the others, but when it came his turn to partake of food, somehow or other he always managed to climb up over them so as to be ready. I know that the egg from which this little fellow emerged had not hatched on the day when the other two did, and one of the eggs did not hatch at all. This one remained in the nest unbroken until all the young had flown.

One other interesting feature is shown by the young bird on the right. Notice the double impression of his lower mandible and the sweep between them, while the upper mandible is sharp. This shows that his head was rapidly oscillating about the upper bill as an axis. This movement peculiar to all young birds is one of the chief causes of failure when taking this class of photographs. The motion is usually



Fig. 6.

Photo from life.

a swaying one rather than a rotary, and the result is generally to blur the picture.

The next day I caught the male bird (photographically) as he was bringing a dragon fly (Fig. 3.) This insect had been specially prepared for young birds and was divested of wings and all but one of its legs. To my astonishment, the male Vireo stepped up and coolly thrust this large insect headfirst down the throat of his smallest little one. About two inches of the flies body was left projecting from the young birds mouth and his contortions as he slowly but surely swallowed it were painful to watch. It was fully four minutes before the last of the dragon fly disappeared and the diner settled down in the nest to rest. For about fifteen minutes the head of this particular bird was invisible but at the end of that time it bobbed up as earnestly and wide open as before. The effect of motion on a dry plate is shown in Fig. 4. Here the movement of the adults head is clearly indicated by the streaks which extend from the breast to the bill showing the sweep of the bird's head during the early part of the exposure. One hundredth part of a second, which is the quickest exposure obtainable on most lens shutters, seems to be a remarkably short time to non-camera users, but it is entirely too long in which to photograph a moving object at short range even though the motion be slight.

The odd appearance of a Vireo face too, is well shown in Fig. 5. This is the nest mentioned previously in this article. The bird is just returning to sit upon the eggs which are in the nest although it is so deep that it conceals them. After she had settled down as comfortable as she could owing to the limited quarters, I walked up, changed the plate and made the photo for Fig. 6 without disturbing her. She showed a decided lack of judgment in the choosing of the place for her nest. It was swung from a young oak and was built nearer the ground than I have ever before seen one of this species. When I first saw the nest it held one egg and at that time the bottom of the nest was within six inches of the ground. When the photograph No. 6 was taken, the weight of the four eggs, bird, and increased growth of leaves had caused the bottom to touch the ground. While the nest was perfectly concealed from above, the eggs had been there less than a week before they formed a meal for one of the numerous red squirrels or chipmunks, both of which fairly abounded throughout the woods.



THE WARBLING VIREO.

"Dear me, dear me; hear me, hear me."

What's the matter pray?

Clatter, clatter; chatter, chatter,

All the livelong day.

Up among the bloom and leaf,

Peeping out from underneath,

Little bird so pretty, O,

Don't you ever stop to breathe,

Darling little Vireo?

Trees that screen it, dainty greenlet,

Never screen its song.

"What so happy, O, as the Vireo?"

Ringeth loud and long.

What so cheery, O, as the Vireo,

What so jolly, O, sweet,

"What so merry, O, as the Vireo?"

All the leaves repeat.

If rain doth spatter, thunder clatter,

Still for a bit I'll be.

But the sun's behind it, I never mind it,

Safe up in my tree.

It doesn't matter, the clouds will scatter,

So I rest myself a wee,

Then clatter, clatter, chatter, chatter,

Over lawn and lee.

"Hear me, the Vireo, all so merry, O."

Bubbling in my tree.

My mate, you've heard, is a lovely bird,

Looks just like me, so neat,

In our home on the limb, all snug and trim,

Is my little wife, so sweet.

Greenish brown is her quiet gown,

White is her downy breast.

Sweet, have no fear for I'm very near.

To the place I love the best.

When the nestlings come to our little home,

My joy will be complete.
Then what so happy, O, as the Vireo,
What so merry, O, sweet?

I've the gift of tongues. I can make a speech.
I can give a sharp little Cat-bird screech.

Me-a. Me-a.

All the little bugs they try to flee
And hide themselves in the bark of the tree,
But they're not spry enough for me.

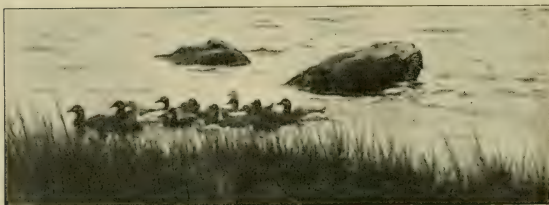
Me-a. Me-a.

I turn a somersault with perfect ease.
I swing from twig to twig of the trees.
I work so hard and I try to please.

Me-a. Me-a.

I cock my quick little roguish eye
When you stand so near and whistle'and spy.
My little gray cap's almost awry,
My tail's spread out like a V;
But you'd never harm a Vireo,
Merry little Vireo, pretty little Vireo, see.
What so cheery, O, as the Vireo,
What so jolly, O, tweet.
What so happy, O, as the Vireo,
What so merry, O, sweet?

BERTHA A. JOSLIN.



A PATCH OF SUNSHINE.



I HAD been searching all the morning for a luna moth, but so far had been unsuccessful; and yet I knew that this was a good hunting ground. I had often found their cocoons among the dry leaves or attached to a slender branch of some low-growing shrub. And more than once, during my evening rambles, I had caught brief glimpses of green wings floating indistinctly among the shadows. Even by daylight it was dim and cool in these woods, and the leafy recesses were full of mysterious whispers. Overhead the branches were thickly interlocked, and from behind the swaying lattices came the rich notes of unseen choristers. I walked on as softly as possible, and tried to separate my favorites from the multitude of voices. Occasionally squirrels chattered to me from neighboring branches, and once a rabbit scurried across my path and paused for a moment to give me a timid glance of inquiry ere he disappeared under a dense mass of laurel.

Small white moths fluttered among the undergrowth, and now and then made blundering excursions about my face. Presently I came to a small open space where a stream of sunshine came glancing down through the trees. A large chestnut had been overthrown by some recent gale, and its upturned roots, and the irregular fringe of low blue huckleberries which surrounded them were bathed in the golden shower; and all the chirping and twittering birds of the neighborhood, and all the butterflies and bugs and small insects, seemed to have gathered in the sunshine to hold a carnival of joy. An Oriole held possession of the highest root, and from this point of vantage was pouring down an uninterrupted medley of brilliant notes. A pair of Wrens were hopping from one point to another, or making swift circles about the trunk, darting in here and there among the roots after some insect which the warm sunshine had lured into danger. As I sat down as softly as possible, upon a mossy stone a few yards away, subdued twitters of satisfaction came to me from a space under the roots. I could not see the

owner of the cheery voice, but I knew that my friend the Sparrow was pleasantly engaged in some private enterprise of his own. But I was most interested in a small warbler who was taking a sun bath. He had selected a spot a little apart from the others, and was in the height of luxurious enjoyment when I appeared. As I sat down upon the stone I was careful not to disturb him by the crackling of a twig or the rustling of a leaf. But I need not have feared. The bird was evidently too far gone in ecstasy to be conscious of his surroundings. Apparently he was oblivious of everything but his own enjoyment. Each particular feather stood on end, even to the small ones of his head, and he was constantly putting himself into grotesque attitudes. Now he stood up very tall, with neck stretched and tail flirled out to its fullest extent; again he leaned far over on one side and lifted his wings, one after the other, so that the sunshine could penetrate every part. And after his bath was finished, he spent fully half an hour preening himself.

Each feather was carefully dressed many times over, and his head combed with his claws again and again. And not until each individual feather was arranged to his complete satisfaction, did he seek the roots and join the Wrens in their search after delicate morsels.

In the opposite side of the open space was a large oak, and far up among its branches I had seen frequent gleams of red. Feeling sure that a cardinal bird's nest was somewhere in the vicinity, I half rose, intending to examine the tree more closely. But at that moment the tender opening notes of a serenade fell upon my ear, and, glancing up, I saw a gay troubadour of a bird balancing himself on a slender twig, and evidently trying to attract the attention of some sylvan beauty hidden behind the network of branches. Resuming my seat upon the stone, I arranged myself for an hour's rare entertainment. And I was not disappointed.

When I again arose, the patch of sunshine had shifted from the roots of the fallen chestnut, and was creeping back under the large oak. Most of the birds had disappeared, and the music of the insects had dwindled to the dull hum of a solitary bumble bee and the strident whirr of a pair of dragon flies that had wandered up from a neighboring swamp.

One of the small white moths fluttered past me, and I idly watched him as he settled down among the leaves of a laurel thicket.

Then I noticed the peculiar movement of what appeared to be one of the leaves, and I stepped forward for a closer examination. As I parted the branches, a large green moth, with purple-bordered wings and yellow antennae rose sleepily into the air. But I was too quick for him, and a moment later I had a fine specimen of *Actias luna* in my possession.

Identification Chart No. 10.

No. 475. American Magpie, (*Pica pica hudsonica*.)

Found from Alaska to Arizona and New Mexico and from the Plains to the Cascade Mountains. Length, about 18 inches. Eyes, bill and feet, black. General plumage an intense black, glossed with purple and green.

No. 476. Yellow-billed Magpie, (*Pica nuttalli*.)

Found in California west of the Sierra Nevada Mountains. Except that the bill is yellow this species is exactly like the last. This bird is not regarded as a separate species by some, yet for some unaccountable cause the majority of the birds found in this comparatively restricted locality have the yellow bill, while those outside have a black one.

No. 497. Yellow-headed Blackbird, (*Xanthocephalus xanthocephalus*.)

Found from the Mississippi River to the Pacific coast, and from British Columbia to Mexico. Length, 10 inches. Whole head, neck and breast, a rich yellow. Space around eye and bill, black as is the rest of the plumage. A large white patch on the wing is formed by the greater and middle coverts. Female, mostly dark brown. A line over the eye, the throat and breast are a dull yellow. They have no white patch on the wing. These birds sometimes stray from their regular range and are found east.

No. 501. Meadowlark, (*Sturnella magna*.)

Eastern United States and southern Canada. Length, 10 inches. Feathers of the back and neck, variegated with black, reddish brown and yellowish. Wings and tail, brownish and grayish and barred with black. A pale median stripe and line over the eye. A short black stripe behind the eye and broad crescent across the breast. Throat and breast, bright yellow. Under parts pale, the sides washed with brown and streaked with black. Outer tail feathers white.

No. 501 a. Mexican Meadowlark, (*S. m. mexicana*.)

Smaller and darker than the eastern bird. South-western United States.

No. 501 b. Western Meadowlark, (*S. m. neglecta*.)

Western United States from the Plains to the coast, and from British Columbia to Mexico. Differs from the eastern form in having the yellow extend over on the cheek.



No. 635. Bahama Honey Creeper, (*Coereba bahamensis*.)

Found in the Bahamas and on the keys off the coast of Florida. Length, 4.5 inches. Dark brown above and yellow below and on the rump. White spot on wings formed by the bases of the primaries.



635.

No. 636. Black and White Warbler, (*Mniotilta varia*.)

Eastern United States and Canada. Length, 5 inches. Streaked above and below with black and white. White spots on the inner webs of the outer tail feathers. The female has less black than the male and is mostly white below.



636.

No. 654. Black-throated Blue Warbler, (*Dendroica caerulescens*.)

Eastern North America, from Labrador to the West Indies and Central America in winter. Length, 5 inches. Male: Above, slaty blue, the back being more or less streaked with black. Large white spot at the base of primaries. Female: Upper parts, olive gray. Below, yellowish white. Known by the small white spot at the base of the primaries.



654.

No. 661. Black-poll Warbler, (*Dendroica striata*.)

Whole of North America east of the Rocky Mountains. Length, 5.5 inches. Upper parts, grayish olive streaked with black. Whole crown, jet black. Upper mandible, dark. Lower mandible and feet, flesh colored. Female: Entire upper parts, including the crown, greenish olive streaked with dusky. Under parts, white washed with yellowish and faintly streaked with dusky. Young more like the female, but paler and the streaks barely showing.



661.

No. 665. Black-throated Gray Warbler, (*Dendroica nigrescens*.)

Western United States, from British Columbia to Mexico. Length, 4.5 inches. Above, bluish-ash streaked with black. Below, white with the sides streaked. A bright yellow spot in front of the eye. Female like the male except that the black of the crown is mixed with the ashy of the back and the black of the throat is broken by white tips to the feathers.



665.

WOOD THRUSH.

A. O. U. No. 755.

(Turdus mustelinus.)

RANGE.

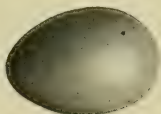
United States east of the Plains. North to the southern boundary of Canada and south in winter to Guatemala and Cuba. Breeds from the middle states northwards.

DESCRIPTION.

Length, 8 in.; extent, 13 in.; tail, 3 in. Bill brownish with a yellowish base. Eye brown. Feet yellowish or flesh colored. Upper parts a tawny brown, shading gradually from a bright reddish brown on the head and neck to an olive brown on the tail. The under parts are pure white, abundantly spotted on the breast and sides with dark brown.

NEST AND EGGS.

The nest is situated not far from the ground in bushes or low trees. It is made of leaves, grasses, fibres, etc., held together with mud. The nest is usually more artistic viewed from without than is the Robin's, as the cement is concealed by the other materials with which it is composed. They lay from three to five plain greenish blue eggs. These are very similar to the Robin's except that they are a little smaller.



HABITS.

In all respects the Wood Thrush is the king of thrushes. He is the largest of the family and is the most beautiful. He is the only one having the spots on the breast and sides bold and distinct so that there is never any cause to doubt his identity. He is the only one other than the Hermit Thrushes that has both tawny and olive on his upper parts. As the Hermit Thrush has a tawny tail and the remainder of the upper parts olive, and the Wood Thrush has a tawny head while his back and tail are olive, this only further tends to distinguish the two. Among all the sweet voiced members of the Thrush family, the song of the Wood Thrush is the sweetest. From early May until late in July they daily add their voices to the general chorus and the woods are filled with wondrous melody.

They love the solitudes of the deeper woods and it is there that their voices are raised in fervent song. Just before dusk when the other birds have retired for the night, the oppressive stillness of the woods is



WOOD THRUSH.



Photo by C. A. Smith.

YOUNG WOOD THRUSH.

broken by a song—a song so clear, simple, and flute like as to touch the very soul of mankind. Slowly and deliberately, the musician delivers each note of his entrancing song, and as the last sounds fade away into silence, they are caught as if by an echo and repeated by a second chorister on the other side of the woods. To and fro, the thrilling notes are wafted until night turns all things to a uniform color, when each, tucking his head under his wing, seeks well earned rest.

Like all gifted artists they are quite self-conscious. Even a noted prima donna can not walk with a more satisfied air then they as they daintily step along the fallen tree trunks and through the tangled underbrush. It is an event worthy of note to steal upon and watch one while he is in the ecstasy of song. I have seen one perch upon one foot for not less than half an hour and without changing his position in the least, mock the other fellow on the opposite side of the woods, who perhaps was in the same position. There he stood with eyes half closed and head thrown back while the only visible movement was the swelling throat. Apparently lost in the rapture of his own melody and oblivious to everything about him, I doubt not but what I might have



Photo from life by C. A. Smith.

WOOD THRUSH ON HER NEST.

quietly approached to within reaching distance before he discovered me.

The lack of fear shown by these birds while upon the nest seems to be one of their characteristics throughout their range. The accompanying excellent photograph of a "Wood Thrush on her Nest" taken by Mr. Clinton A. Smith shows the position that they commonly assume upon the approach of anyone. Their lack of fear may be seen from the following quotation from him, although this bird I think, must have been an exception as I have never seen or heard of one quite as tame. "This photograph was made after having already exposed two plates upon the same bird. The first one was taken at what I considered a safe distance; then as she did not fly I moved up closer and exposed another plate. The third one and the one shown was taken at a distance of only three feet and then to my surprise the bird did not leave the nest, but allowed me to walk up and lift her off. I supposed that she had young but found that there were three blue eggs in the nest. These all hatched and were flying the next time I visited the nest. The photograph was taken with the back combination of the Rapid Rectilinear Lens."

A SCHOOL OUTING.

It had been my custom for several years to take my school and go to the woods at least once during the term, for the purpose of studying nature and gleaningsome truth from her varied pages. I believe this is the only practical way to impress upon the child's mind, the wonderful and beautiful lessons contained in the great book of Nature.

It was on the afternoon of May 17th that we left the schoolroom, about fifty in number, bent on making this one of the best of our annual outings, and to say the least we did not overestimate ourselves.

We had gone but a short distance when we came to a dilapidated coal ripple, and to our great delight some of the boys announced "a robin's nest," and as birds were to be the special lesson for this trip, we were much pleased to find that Mr. and Mrs. Robin had utilized one of the horizontal timbers of this relic of a once flourishing industry, over which the black diamonds had for years tumbled, tumbled into cars to be borne to the iron mills or perchance to the happy home of the cottager. This nest was built strictly in accordance to the regular Robin style of architecture and contained three greenish-blue eggs. Leaving Robin we sauntered leisurely up the valley and presently came to an abandoned coal mine, evidently one that had furnished part of the coal just referred to. In went some of the boys and to our pleasure stated that Pewee (Phoebe) had a nest in the mine. Upon investigation we found that the beautiful moss covered nest contained four pearly-white eggs of this wise bird that "buildeth her house upon a rock." On leaving Phoebe to the quiet of her abode, we strolled along with our eyes closely watching bush, tree and fence lest we might skip some nest or bird. As we came to a thorn bush we found that feline imitator, the Catbird, had a nest here containing three bluish-green eggs. Our next discovery was the house of a genial farmer who generously treated us to the draughts of the crystal fluid brought from far down in the earth in a veritable "oaken bucket."

After resting for awhile under the broad trees that shaded his spacious lawn, we again took up our search and were rewarded by finding a Barn Swallow's nest with four eggs. Some of the boys having separated from us returned to report that they had found a Phoebe's nest with five young, and a ground bird's (one of the sparrows that nest on the ground) containing four eggs. This was truly a delightful and beneficial outing, and I would say to teachers, after years of experience that I find this the only practical way of teaching Nature.



Photo from life by Geo. E. Mculthrope.
PHOEBE ON NEST.

THE CAMERA AGAINST A PHOEBE.

EDITOR OF AMERICAN ORNITHOLOGY.

Dear Sir:—I was much pleased to learn that my Phoebe photo had been successful in your contest. It was through the medium of your magazine that I was induced to try this form of photography, and the past summer I have spent some of the pleasantest hours of my life attempting to lure some wily bird within range of my lens.

The first subject upon which my attention was fixed was a Phoebe who had built her nest on a beam under the roof of a shed. She proved to be a very difficult subject to manage. It was very dark in the shed and of course photographing a live bird under that condition was out of the question. The first thing to do was to find a means of lighting the nest sufficiently to admit of a snap shot. Obviously mirrors and reflected sunlight were the solution of this. I secured two large, heavy mirrors and placed one of them outside at the correct angle to throw the light in the desired place. But what a change this made. The nest and the woodwork surrounding it were in the brightest of sunlight while the rest of the interior was even more dark by the comparison. What bird would have the hardihood to return under these changed circumstances.

Before trying the old bird I thought it would be a good idea to get a good picture of the nest and eggs. But here again was another difficulty. The nest was situated above my head and close to the roof of the shed so that the eggs could not be seen. I could easily photograph the nest but I wanted to show the eggs too. The second mirror helped me out of this trouble and after I had it in position above the nest I made an exposure and got the nest as shown here. Besides showing the structure of a Phoebe's nest, this photograph has furnished no little amusement. The picture as printed here is right side up, but immediately upon handing the photograph to anyone, they invariably quickly turn it around as though afraid that the eggs might fall out, and it takes some explanation on my part to show them that they are not looking at the eggs but only an image of them.

Now to get the old bird. The second mirror was removed and after attaching a long rubber tube to the shutter I hid myself. She wanted to go back to the nest but every time that she went under the shed the brilliant state of affairs there caused her to make a hasty exit. Time after time she would almost touch the nest and then dash out as fast as possible. The shifting sun made it necessary to adjust the mirrors about every five minutes and undoubtedly this action delayed the Phoebe in her decision to return to the nest. After about an hour's

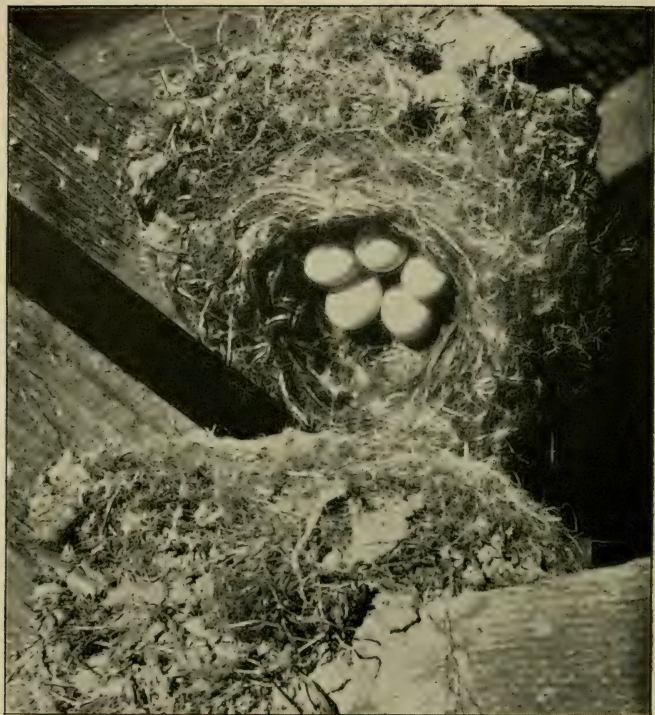


Photo by Geo. E. Moulthropé

NEST OF PHOEBE.

waiting and many false alarms she finally did settle on the nest for the smallest fractional part of time. That instant was the one I had been looking for and the click of the shutter was the signal that I had won in my contest with the Phoebe. It was only in the dark room though that the extent of my victory could be ascertained. Another shorter wait and another shot was obtained of her facing the other way. I was a little afraid that the eggs might become chilled during the operation but later found out that they hatched all right and in due course of time the young were flying about with the old.

Before I found this nest, I had found several under bridges and one in particular that interested me, while trout fishing. I passed under a bridge, and looking up noticed a Phoebe's nest built on a beam similar to the one shown in a previous number of your magazine, and on the next beam to it was another nest. I thought of course that one must be a last year's nest, but as two birds were there and it was a very warm day and I had had poor luck trouting, I sat down on the bank and watched the birds for about an hour. I found that there was only one pair and that they were constructing the two nests, as the same bird would build awhile on the one nest then work on the other. As they only made short trips after material and were in sight all the time, I saw the same bird go repeatedly from one nest to the other and concluded that they were confused and did not know which nest to work upon.

I think that camera hunting is one of the most fascinating of sports, and I think that a trial would convert a great many old-time hunters and also save the lives of thousands of birds. As for myself I know that one good negative of a bird as they actually live would give more satisfaction to me than would the killing of thousands with a gun even if I cared for such slaughter.

I have quite a number of interesting photos and would be pleased to hear from any of your readers who might care to exchange photographs with me.

GEO. E. MOULTHROPE, Bristol Conn.





MY DEAR YOUNG FOLKS:

Now comes the Thanksgiving month when our boys and girls will be flocking to the old homestead to help grandfather and grandmother "count up their marcies," and I am sure there is no one who begins to count who will find the month long enough to sum them all up.

We give you a new game to try on Thanksgiving day, and if you like this one you shall have an out-of-door game later on. J. Lewis Clay gives such an excellent description of one of our most cheery, confiding birds, that, I will print it and see how many of our little readers can name it. Stafford Francis reports a lawn-party of twenty-four Robins. I surprised a large party of Robins in the woods the other day, but a great many Flickers were also invited. They were playing very quiet games, flying about from tree to tree, and back and forth to the ground with soft chirpings.

Edward Graves of Clearmont, Mo., sends a good description of an Alder Flycatcher, with accounts of three of their nests that he has found; among other bird-homes he visited last summer were those of the Scarlet Tanager, the Yellow-throated Vireo, and the Yellow-breasted Chat. I am sure his name is worthy of a place at the very head of the list of bird observers, for he saw last season no less than one hundred and ten birds, which exceeds Stanley Cobb's good record by seventeen. Can any one send a longer list?

When our next letter reaches you, you will be enjoying the Winter birds. I hope when you pull the wishbones on the twenty-seventh you will think of me.

Your Friend,

MEG MERRYTHOUGHT.

ANSWERS TO PUZZLES IN OCTOBER NUMBER.

Numerical Enigma. Sandpiper. Numerical Puzzle. Raven.

FASHION'S FANCIES.

Last June there gathered in a glen
Not many miles away,
A host of birds from every clime.
Who chirped and sang all day.

Was it a Guild? A Womans Club?
A Mother's Meeting? No.
Nor did they meet to arbitrate
Nor grand degrees bestow.

The Father-birds in Council met,
For what, you'd never guess.
They met—the fashions to discuss,
And latest styles of dress.

For Scribe, there came from Africa,
A Secretary bird.
The Chairman was a Snowy Owl,
Serene, what e'er occurred.

A pert young Wren made the first speech,
He talked so fast and bold,
You would ne'er think to hear him speak
His wife was such a scold.

"I think," said he, "for all round wear,
For country, or for town,
For concert, feast, or common use,
There's naught so good as *brown*."

A Partridge, Sparrow, and a Hawk,
Wood-thrush, and Robert White,
With one accord, loudly exclaimed,
"Sir Christopher is right."

"Our colors are more cheerful though,
Made of condensed sunshine,"
Sang Yellow Warbler from a bush
"Your sentiments are mine."

Sang Goldfinch, who was eating seeds,
"But velvet trimmings add,"
"Yes," echoed back a Chickadee
"Black velvet is not bad."

A Blue Jay screamed till he was hoarse,
"All gowns should be of *blue*,
I, with Bluebird, in azure robes,
Reflect the heaven's bright hue."

"The *color* matters not so much,"
Declared a stately Stork,
"But gowns should always be made short,
Its easy then to walk."
Then Tanager blushed rosy red,
For awkward Penguin cried,
"Pray add full ruffled pantalets,
Your bony legs to hide."
"Such a garb as that, may do for you,"
Spake Peacock, in disdain,
"But I, who royal courts attend,
Shall wear a gorgeous train!"
"A wide neck-ruff, gives much more style,"
Said Partridge. "Better yet,
A noble crest," cried Cockatoo,
Kingfisher and Egret.
Just at this point, a small gray owl,
Who dozed upon a beech,
Rose, blinked his eyes, looked very wise,
And gave a dreadful screech.
At once, a score of tiny birds
Flew way back to the rear,
While Sir Owl spoke for two long hours,
Mid frequent cries of "Hear."
Each argued long, but like mankind,
Convinced against his will,
When all was said, each bird maintained,
The same opinion still.
And when the night, around the glen
Drew shadows soft and gray,
There were as many diverse minds
As at the break of day.
So, to this day, these feathered folk
Slight fashions stern mandate,
The Grosbeaks wear black velvet hoods,
And Catbirds gowns of slate.
The Crows still wear black glossy coats,
The Buntings still wear blue,
The Blue Jays dress in blue and white,
I'm glad they do. Aren't you?

ROLL OF HONOR:—Marietta Washburn, Goodwin, S. D. Geoffrey J. Giles, Comfort, Texas. Ralph M. Hodnett, St. Paul, Minn. Elizabeth J. Hill, Cheshire, Conn. Stafford Francis, Exeter, N. H. Hart Irvine, Mercersburg, Pa. Howard A. Houston, Wooster, O.

NUMERICAL ENIGMA.

(TWO WORDS.)

I am composed of 18 letters. 1, 14, 15, 11, 5, 17, 18, is one who has charge of the keys of a prison. 7, 15, 17, 17, 11, is one of Nature's restful colors. 2, 3, 11, 5, is several skeins of yarn fastened together. 13, 15, 17, 3, 13, is an unusual pleasure. 12, 15, 17, 3, 13, 2, 17, 3, 15, 1, is the name of a character in Pilgrim's Progress who conducted Christiana and her company to the House Beautiful. 9, 17, 17, 15, 18, 13, 2, 15, 14, 6, 2, is a bird that sings sweetly at evening. 9, 8, 5, 10, 4, 7, 6, were pirate chiefs from Scandinavia in the eighth Century. 6, 13, 15, 10, 9, 10, 11, 12, is what you are now doing. My whole is a bird dear to all American boys and girls.

WHAT IS ITS NAME?

The male bird is yellow all over except its wings, tail and his forehead, which are black. It is about five inches long, the tail being two inches. The female is like the male, except the yellow is a yellowish gray. They lay four or five eggs. The eggs are about a half inch in length, and are pale blue. The nest I found was in an apple tree about six feet from the ground. It was made of soft down of the thistle, cotton and fine horsehair. I found the nest about the middle of last month, (August.) When the birds fly they sing. They nearly always fly with a wavy motion, singing as they go up.

J. LEWIS CLAY, Chicago, Ill.

STILL HUNT.

(A GAME FOR THE CHILDREN.)

One corner of the room is the *Cage*; the opposite corner is the *Nest*; a row of chairs equal distant from the *Nest* and *Cage*, is the *Thicket*; this row should contain one less chair than the number playing.

One child is chosen as the *Hunter*; the other children stand in a line and each one (mentally) gives himself the name of some bird. Number one in the row describes the bird which he represents, and the *Hunter* tries to guess what the bird is. If unable to guess from the description he has the privilege of asking ten questions. When he guesses the name of the bird correctly, (that is *captures* him) the bird takes his place in the *Cage*. The hunter then proceeds to number two and tries to *capture* him in a similar manner, and so on down the line, asking but ten questions of each one. Should the *Hunter* be unable to

identify a bird he sends it to the *Nest*. When all the birds are either in the *Cage* or *Nest*, that is, when the *Hunter* has received descriptions and asked questions of every child in the line, he sits down in the Thicket, (in one of the chairs in the row at the center,) and begins to spell very slowly, the words American Ornithology, stopping suddenly wherever he chooses before reaching the last letter and saying "*Bang!*" As the *Hunter* begins to spell, all the Birds leave the *Nest* and the *Cage* and march around the chairs, as he says *Bang*, each one tries to sit on a chair in the *Thicket*. (If desired, each bird sent to the *Nest* may be required to pay a forfeit, when the *Hunter* shall act as judge.) The one who fails to secure a seat is the *Hunter* in the next game.

GLEANINGS.

Have you ever seen two cock Blue Jays fighting in mid-air? There is a joust of brilliancy. They whirl over and over so fast that they look like a blur of amethyst smoke, shot with gleams of white fire; how their wings clash and their bills clack. Not much harm is done, but I venture to predict that no two human prize fighters (but are they ever human?) can give and take blows so rapidly.

MAURICE THOMPSON.

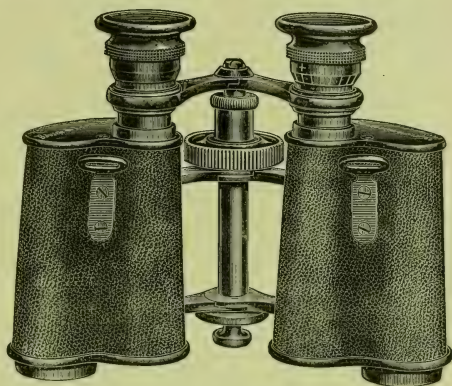
THE HUMAN BIRDS.

A facetious man who rejoices in the name of BIRD, conceived the idea of calling a convention of all the people in Philadelphia who belong to his tribe. Of course it was a joke, but a glance through the pages of the directory convinced him that such a gathering would be a big one. He discovered there were an even hundred plain Birds, but the variety of those who specified their kinds was appalling. The list as far as he went, was as follows: Doves, 15; Eagles, 8; Larks, 6; Peacocks, 29; Pigeons, 1; Parrots, 40; Nightingales, 9; Partridges, 30; Sparrows, 7; Sparrow hawks, 7; Wrens, 10; Robins, 15; Flickers, 5; Thrushes, 4; Canaries, 3; Geese, 2; and Turkey, 1. There were two Chippies and Philip Ducks upheld the dignity of his branch of the family.—*Philadelphia Record*.

BIRD GLASSES

Like almost anything else are of various grades of excellence and also like other things it does not pay to buy the cheap kind. Better spend a little more at first and get the

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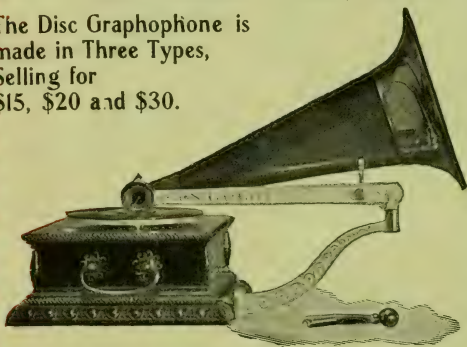
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AMERICAN ORNITHOLOGY

FOR THE HOME AND SCHOOL



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CHAS. K. REED — WORCESTER, MASS.

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ALONE WITH THE BIRDS AT DAWN.

Just as the soft light was breaking
O'er the hill tops far away
And the happy birds were waking
To welcome the coming day.

When the soft grass was gemmed with dew
O'er the gentle sloping lawn,
I strolled the peaceful woodlands through,
Alone with the birds at dawn.

The Lark's song from the meadow land,
Came in cadence sweet and clear,
It fell like some old anthem grand
Upon my listening ear.

The Catbird from his perch on high
Sang love's story sweet and old,
The Yellow Warbler flitted by
Like a sudden gleam of gold.

The Kingbird passed in graceful flight
To catch his prey upon the wing,
And from the elm tree's giddy height
I heard the loved Robin sing.

From swaying branches overhead,
The Blackbird orchestra sang,
Where Aurora, her radiance shed,
Until all the wild woods rang.

O'er the woodlands there comes a hush
As on ears attentive fall
The varying notes of the Thrush,
Sweetest singer of them all.

An ecstasy my bosom stirred,
Slumb'ring dreams awoke once more
As that sweet melody I heard,
With a joy unfelt before.

If sorrow lurks within your breast,
If from you some joy has gone,
Seek once again sweet peace and rest
Alone with the birds at dawn.

HATTIE WASHBURN.

Chick-chickadee," I saucily say;
My heart it is sound, my throat it is gay!
Every one that I meet I merrily greet
With a chickadeedee, chickadeedee!
To cheer and to cherish, on roadside and street,
My cap was made jaunty, my note was made sweet.



YOUNG CHICKADEES.

First Day Out of Nest.

I "chickadeedee" in forest and glade,
"Day, day, day!" to the sweet country maid,
From autumn to springtime I utter my song
Of chickadeedee all the day long!
The silence of winter my note breaks in twain,
And I "chickadeedee" in sunshine and rain.

—C. C. A.

DOMESTICATING THE CHICKADEE.



IN the September number of this magazine, some of the results of our attempts to tame wild Blue Jays were related. The aim in that case was merely to allay the abnormal suspicions, as to human intentions, which seem to have become a part of the Jay nature, and to teach the birds to come to our windows to be fed.

Incidentally an attempt was made to do still more with the Chickadee, which being naturally unsuspicious, can be tamed by any one who has a little spare time and some patience.

It is now well known that, in forest or orchard, the Chickadee is one of the most useful birds, and that, so far as known, it has no habit of destroying any of the products of husbandry.

If such birds as this can be brought to put their confidence in man, to leave the woods where they now breed in hollow trees, and to take up their abode in dwellings prepared for them about our buildings, no doubt their numbers can be so increased under our protection, that the good they now do will be multiplied many fold. It is well known that in Europe many kinds of birds which once regularly bred in hollow trees, in caves, or under overhanging banks or rocks have so changed their habits that for hundreds of years they have nested in, or about, buildings, chimneys, walls, or in bird boxes put up for their accommodation.

It is also well known that our newer American civilization has induced similar changes in bird habits and even in bird distribution. The Chimney Swift, Tree Swallow, Purple Martin, Bluebird, and House Wren have found nesting places provided for them in or near our dwellings, and in many cases they have occupied these from choice, even before their former homes, the dead and hollow trees of the forest, had been cut down.

The Phoebe and Barn Swallow, finding that the dwellings of man afforded more secure retreats than cliffs or caves, have become widely distributed along the lines of human emigration. The Night Hawks now breed, to some extent, on the flat roofs of large city blocks. In Europe certain Woodpeckers and Titmice are among the birds which have now become semi-domesticated, and occupy dwellings put up for them by the



WATCHING THE HOUSEKEEPING.

householders. Here the Flicker has already begun to inhabit buildings, using them chiefly as a winter protection and making a doorway of its own. The Chickadee, our only common titmouse, sometimes finds shelter about buildings during severe winter storms, but does not yet breed in buildings or bird boxes, except in rare cases.

Thirty years ago, before the English Sparrow became common and widely distributed here, the Chickadee was a familiar bird about the farm, both in Winter and Summer. Its nest was built in some hollow fruit tree in the orchard, yard, or garden. Where Sparrows are scarce it still seeks such situations. Last Summer a pair of Chickadees reared their young in a hollow pear tree near the doorway of a neighbor, but wherever the ubiquitous sparrow has come to stay, the Chickadee is driven to the woods, returning to the farm yard chiefly in Winter when Sparrows do most resort to the village streets. There seemed to be no reason why the Chickadee could not be induced to breed in bird boxes if first the Sparrows could be banished from the premises.

Bird boxes were put up on our buildings and trees quite largely in the Spring of 1901, and the Sparrows immediately took possession. They were pursued with the shot gun until the few survivors fled in dismay, but not until they had managed to prevent most other birds from breeding in the boxes for that season. However, the lesson the Sparrows received was so effectively given that they have not appeared since, though they still occupy a neighboring farm, having destroyed the nests of a colony of Eave Swallows and taken possession of the premises, by force.

The Sparrows having been disposed of, other interlopers appeared. Squirrels and White-footed Mice occupied boxes put up in the woods, while the Jays manifested considerable curiosity as to the contents of the bird boxes. The Chickadees made no attempt to use them, merely looking one over now and then as if to see what new creature would pop its head out of the entrance. In the Fall of 1901 food for the birds was put out as usual about the house windows. The window over the wood shed was provided with what we might call an observation box. This box was made of old weather-beaten lumber and fastened to the window sill by a board support a foot long. A projecting piece of board protected the entrance from the driving rain. So far it appeared like any ordinary bird box, but the side next the window had the edge rabbited for glass like a windowsash. A pane of glass was fitted into this side and secured with glaziers points. The glass was covered from view externally by a shingle which was fitted into the rabbiting over the glass, and hinged at the bottom, so that it could be opened downward and laid flat on the supporting board. When this had been



MOTHER COMES.

done all that went on inside could be viewed from the window. This box is similar to one I invented, when a boy, to watch the nesting habits of Swallows and Bluebirds. The glass is necessary only to prevent the entrance of bird enemies or the premature egress of young birds when the box is open. The box was so located that the direct rays of the sun could not strike the young birds when the door was opened. The photographer might prefer to have the sunlight strike directly upon them, but when the principal object is to watch and preserve them, this is a danger that must be avoided. The picture of the young birds in the nest shows how readily they may be observed or photographed in this manner.

As the weather became severe some of the Chickadees evinced considerable interest in this box, and toward Spring one or more of them probably passed the night there. When Spring opened and the birds began to pair and retire to the woods to breed, one pair remained behind and began carrying nesting material into the box. Care was observed that they might be left undisturbed in this laudable enterprise, and the members of the family were enjoined not to open the box. An excellent opportunity of observing the nest building was thus lost for fear that otherwise they would be driven away and the main object, the raising of the young in the box would be frustrated. This excessive caution was perhaps not necessary, but nevertheless the Chickadees were allowed to go on with their household arrangements undisturbed, until at last one of our children, overcome by impatient curiosity, opened the cover and stole a look into the box. It was soon noised abroad that there were four or five "cunning little birds" in the box. Investigation revealed seven. The birds were now watched while feeding their young. The second picture shows how anyone at the window could look directly into the nest, and see the old birds feeding and caring for their young. When this picture was taken the male bird was in the nest feeding the young while the female was clinging to the outside of the box, just beneath the entrance hole, with a beak full of plant lice and spiders for the next feed. It is by such methods of observation as this that we are able to learn much of the character of the food birds feed to their young. The great value of the Chickadee as a destroyer of hibernating insects and their eggs in Winter has been shown by Dr. Weed's investigations. It is also, in the warmer months, a great destroyer of injurious insects. We were therefore, prepared to find it feeding great quantities of insect food to the young. During the greater part of the day the young were visited by one or the other of the parent birds as often as once in three to five minutes, and sometimes oftener. The old birds nearly always brought

food. Caterpillars, plant lice and ants, formed the greater portion of the food brought, while the birds were under observation. Grasshoppers and spiders were occasionally noted. The birds made frequent trips to two young apple trees, which were much infested by plant lice and in a short time they practically cleaned the trees, which have since done finely, while two young cherry trees, at a distance from the house, and not visited by the birds, have since died, apparently from the effects of injuries to the twigs and foliage by another, but similar, species of plant louse. An apple tree near by contained a nest of the tent caterpillar, but the young caterpillars never grew large enough to do any material injury to the foliage, so closely were they pursued by the Chickadees and a pair of Bluebirds that occupied a box on the apple tree. Canker worms and other geometrid larvae were cleaned from the near-by trees, most of them going the same road, down the throats of the eager and expectant youngsters in the bird boxes.



FATHER COMES.

The young birds grew in grace, beauty, and strength, until on June 7th the stronger ones began to manifest signs of a disposition to explore the outer world. One in particular stood up, fluttered its wings and leaped repeatedly upward toward the entrance.

On the 8th the editor of this magazine was notified that the subjects were ready to "have their pictures taken" and could not wait. Mr. Reed replied promptly and was at hand with his camera on the morning of the 10th.

The pictures which illustrate this article are the results of his skill and care. He came just in time. The young birds were evidently about to fly. The old birds were calling them from the trees, and they answered, tried their wings and, now and then, sprang upwards. The box was opened and the camera placed in position at the window in the loft at 9:50 a. m. The old birds visited the young and fed them twelve times before 10:22. They brought either caterpillars or bunches of ants and plant lice in their beaks and distributed them to the open mouths of the eager seven in the nest. During this time the accompanying snap shots of the old birds at the entrance of the box were taken. A close inspection will reveal the mass of minute insects held in the beak of each bird.



THE HOME AT THE WINDOW.

At 10:22 the largest and most active young bird suddenly made a dash (the glass having been removed for convenience in taking the picture) and flew directly three or four rods into a maple tree, then failing to maintain his hold on the limbs in the face of a strong breeze he fluttered still farther and alighted at last in a stone heap near by.

This seemed rather a remarkable feat for the first flight, and perhaps, could not have been accomplished without the aid of the strong breeze then blowing. This youngster was captured and replaced in the nest,

but again insisted on leaving and this time took two flights, reaching a pine tree some six rods away. The old birds now ceased feeding the young and began to call them. Another sprang out flying nearly as well as the first, going with the wind. Now one of the old birds came to the roof overhead and the other alighted at the entrance of the box.

I was then at the window with my face close to the young, when, as

if by a signal, all sprang out and alighted upon my head, shoulders, and arms much to the delight of the children, who, watching from below, declared that I was "covered with birds." As I remained motionless the old birds came and piloted the five young to the branches of a pear tree near by, which they reached in the face of the strong breeze. The one at the end of the branch, he of the bristling crest, is the ambitious youngster who made the first long flight. If he lives no doubt we shall hear from him. We left the old birds happily feeding their reunited family in the pear tree. These experiments with the Chickadee have accomplished three results. We have induced two individuals of a species to change or modify their nesting habits. We have shown that it is possible to induce another most useful species to accept man's shelter and protection. We have demonstrated that the Chickadee can be so domesticated by this method that its food and nesting habits may be readily studied. What further results may come the future must determine.

EDWARD HOWE FORBUSH.

The melancholy days are come, the saddest of the year,

Of wailing winds, and naked woods, and meadows brown and sear.
Heaped in the hollows of the grove, the Autumn leaves lie dead;

They rustle to the eddying gust, and to the rabbits tread.

The robin and the wren are flown, and from the shrubs the jay,

And from the wood-top calls the crow through all the gloomy day.

WILLIAM CULLEN BRYANT.



WHITE-THROATED SWIFT.

A. O. U. No. 425.

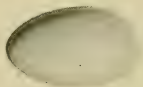
(Aeronautes melanoleucus.)

RANGE.

Western United States, from Wyoming and Montana to the Pacific, and south to Guatemala.

DESCRIPTION.

Length, 7 inches; extent, 14 inches; tail, 2.5 inches. Bill and feet, black. Eye, brown. Top of head and neck, brownish. Rest of upper parts, sooty black, tinged with greenish reflections on the wings and tail. Tips of the secondaries and edge of the outer primaries and tail feathers, white. A white patch on each side of the rump and concealed white spots on the inner webs of all tail feathers near their base. Chin, throat, breast, and line down the middle of the belly, white. Rest of the under-parts as well as the under surfaces of the wings and tail are brownish black.



NEST AND EGGS.

The White-throated Swifts breed in large numbers in the limestone cliffs so common throughout the West. Fortunately they dig their tunnels at such a height up on the face of the cliff that they are rarely secured by the inveterate egg hunters and consequently are very rarely seen in collections. Their eggs are long, pure white, and probably most often five in number.

HABITS

By Dr. R. W. Shufeldt.

The only opportunity I ever had of studying the habits and nesting of the White-throated Swift occurred early in the spring of 1886, at which time I was Post Surgeon at Fort Wingate, New Mexico. I had never seen them in life but once before and that was in 1878 on the Chugwater Creek in Wyoming. There I found them breeding in the highest and most inaccessible cliffs near the old military road between Cheyenne and Fort Laramie. Thousands of them swarmed about their nesting places at the high bluffs.

In some parts of New Mexico they are quite abundant, but by no means easy to collect, from the fact that in that region, too, they resort to the walls of the deepest canyons to breed and only in certain kinds of weather fly low over the ground. Most of these canyons are from three hundred to four hundred feet in depth, and

their sides more or less perpendicular, and the Swifts invariably select their homes in cracks and fissures up near their summit. This accounts for the small number of eggs of these species that are seen in collections.

This Swift is a powerful flier and a handsome bird upon the wing, it's white throat, flanks and secondaries being strongly contrasted with the otherwise dark brown plumage. I have never seen this bird alight anywhere except at the entrance to it's nest, in the places above described, and even then in some instances, it almost seemed to shoot into the cavity without condescending to even touch the sides or the doorstep with his feet. On one occasion I saw a pair of them commence to quarrel when high up in the air, and continue the closely contested claw and wing contest until they reached the ground, where the dust they raised, prevented me from clearly seeing their movements; but in a second they arose and were both in the air and off like two darts in opposite directions.

During cloudy and rainy weather are about the only times when they descend from the heights, and fly like a lot of black and white meteors close over the surface of the ground and low growth of sage brush that grows on the prairie. In clear weather they appear like little specks shooting about against the clear blue sky, fully half a mile above the earth. These birds are always infested with a large species of louse, as well as an extraordinarily big species of tick. Many years ago I sent specimens of these to the British Museum, where they were described as new to science and published in various journals abroad.

The Swift as a rule is quite quiet during flight, but sometimes when flying up and down the canyons where they breed, they give vent to a series of twittering notes, that are uttered with still greater emphasis when they are disturbed by a gunshot or otherwise alarmed when within their nest holes. I believe that their mating is done entirely upon the wing and it is certain that they feed in no other way.

That the intelligence shown by these birds in the selection of their nesting sites, is universal throughout their range, is shown by the following from Bendire's: "At San Diego, Cal., they winter in abundance, and are frequently seen feeding along the beach north of Point Loma. A colony was found nesting on Coronado Island on May 20, but the nests were inaccessible; they were placed behind loose slabs of rock which had become detached from the face of the cliffs, and from 20 to 30 feet above the water level. At



From a colored drawing by Dr. Shufeldt.

WHITE-THROATED SWIFT.

Guadalupe Island, this Swift was very abundant; the ragged, precipitous slides of the island, composed of lava and perforated with thousands of holes and crevices, furnish an abundance of nesting sites, and it is quite probable that this species is resident there throughout the year. At the time of my visit, in May, I found White-throated Swifts everywhere, from the top of the island at 4000 feet elevation, to the beach, and birds were constantly seen to enter holes in the crags; but in each case the nest was as inaccessible as it is possible for a nest to be. On May 18th a Swift was seen to enter a hole in the face of a bluff, within eight feet of its base; even this proved to be as safe as the rest, as the nest was found to be out of sight and several feet back, in a narrow crack in the lava."



Photo by Clinton A. Smith.

ORCHARD ORIOLE.

CHICKADEE.

A. O. U. No. 735.

(Parus atricapillus.)

RANGE.

Eastern North America, north of the Potomac and Ohio Valleys. A resident and breeds wherever found.

DESCRIPTION.

Length 5.25 in.; extent 8 in.; tail 2.5 in. Whole top of head, chin and throat, black. Rest of upper parts brownish gray. Sides of head white; under parts dull whitish, shading into brownish on the flanks. Feathers of the wings and tail edged with whitish. Subspecies;—735a. Long-tailed Chickadee (*P. a. septentrionalis*.) Found in the Rocky Mountain region and east to the Plains. Slightly larger than the eastern Chickadee and the tail averages from a quarter to a half inch longer. The black of the throat extends down on the breast and the white of the head is purer than in the eastern bird. No. 735b. Oregon Chickadee (*P. a. occidentalis*.) Northwest coast region from California to Alaska. Similar to the common Chickadee except that the whites are duller and the sides heavily washed with brownish.

NEST AND EGGS.



LEAVING THE NEST.



Chickadees nest in holes in trees, posts or fences. These may be either dug by the birds or natural excavations. The bottom of the nest is from three to eight inches from the opening and is thickly covered with downy feathers, hair, mosses, etc. They lay from five to eight white eggs that are finely speckled with reddish

brown. Sets are generally complete about the latter part of May.



By the majority perhaps of those who take any interest in bird life, the Chickadee is as well known as any other bird. They are bright eyed inquisitive little acrobats and no little amusement can be had by watching their movements among the branches. With the ease and grace of the most skilled performer they swing from twig to

twig conversing freely with one another in their pleasing language of "de-dee-dee" interspersed frequently with a remarkable shrill clear whistle composed of two notes, the first being of the higher pitch. They are very companionable and if you remain quiet, they will gradually approach even to within reaching distance of your hand. Do not attempt to catch one when he thus puts his trust in you for you will not only fail but will also lose the confidence of a valuable and interesting bird.



I'M A GYMNAST.

If you have never found the home of a Chickadee, you can easily do so. Next Spring before the leaves have come, go out armed with a jack-knife. Perhaps you know of some place where birch trees are abundant. If you do, see if you cannot find some among them that are decayed and only a stump is left. Dig a hole about an inch in diameter into these on the least exposed side, remember where they are and about the end of May visit all of them and see how many of your partially prepared homes are occupied. Last summer I found that four pairs of Chickadees had decided that the locations selected by me were satisfactory to them and all reared their families there. Chickadees are contented in very small quarters and a stump three inches or more in diameter is plenty large enough. They will successfully raise a brood of six or eight little ones in a nest that you would not think one bird could get into. The young seem to be piled in in layers and only one or two at the top can be seen at a time. In spite of their limited quarters, they are very neat birds and their nest is always clean. The bed of feathers and moss that it is made of, is so soft that the young sink way down out of sight in it, and it would seem as if those at the



Photo from life by Geo. C. Embody.

THIS IS MY HOME.

bottom could not possibly breathe. For a few days preceding their departure from the nest, the young take turns in scrambling up to the entrance as if to get a peep into the future that is about to open to them. The young Chickadees are even prettier than their parents, if that is possible; fluffy little bunches of black and white down, supplemented with two bright bead like eyes and a short tail.

The first few days following the egress of the young Chickadees are ones of anxiety and labor for the old birds. There are numerous children to feed and to keep from the clutches of various mauraunders such as hawks, owls, crows, jays, etc. As the young are scattered about it would seem as though it would tax the mental faculties of the parents to remember their locations.

When cold weather begins to come in the fall, several families form in one band and pass the winter together; a lonesome winter it must be



MY MATE IS INSIDE.

with the ground covered with snow and the woods deserted by all except a very few of the most hardy of the winter birds. In the fall they associate freely with the warblers as they migrate and it is strange that they do not continue on with them, to share their pleasures in the south. The reason for their strange choice of winter quarters is yet to be discovered, unless it be that they have an unusual attachment for the old homestead and would rather brave our severe winters than to leave it even temporarily.

At this season of the year, they live on the larvae and eggs of the smaller insects, while some of the more fortunate ones find a welcome lunch counter provided for them by some kind hearted member of the human race who takes more than a passing interest in the welfare of his feathered friends.

Identification Chart No. 11.

597. Blue Grosbeak (*Guiraca caerulea*).

Eastern United States from New Jersey, Illinois and Nebraska southwards. Male: Length 6.5 in. Nearly a uniform rich dark blue. Tail, wings, and feathers at the base of the bill, black, the former being edged with blue. Shoulder bright chestnut and edges of secondaries and coverts pale chestnut. Bill, light horn color. Female: Brown above and paler below, with faint streaks on the under parts. Wings and tail gray, the former with whitish cross bars and the latter edged with bluish. 597a. Western Blue Grosbeak, (*G. c. eurhynca*) Southwestern U. S. from S. Dakota, Colorado and California to Mexico. Male and female like the eastern form.

598. Indigo Bunting, (*Passerina cyanea*).

North America east of the Plains and south of southern Canada. Male: Length 5.5 inches. Intense blue on the head shading into a rather greenish blue on the rest of body. Wings and tail blackish glossed with greenish blue. Female: Above brown and below brownish white. Wings and tail slightly edged with greenish, but the former are not distinctly barred.

766. Bluebird, (*Sialia sialis*).

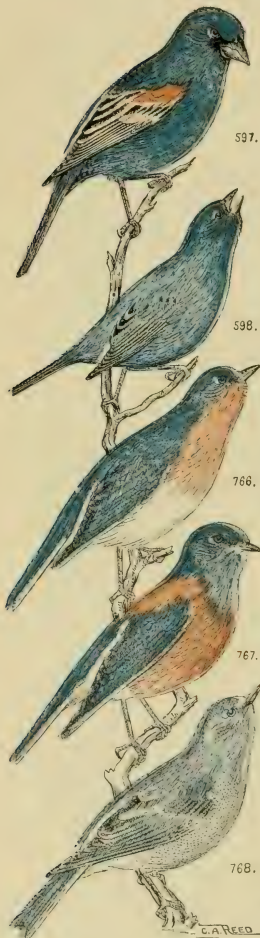
America east of the Rocky Mts. and south of Manitoba and Nova Scotia. South in winter to the Gulf States and Cuba. Male: Length, 6.5 inches. Entire upper parts a rich azure blue. Chin, throat, and breast, chestnut. Rest of under parts, white. Female: Blue of the upper parts mixed with dull, reddish brown, except on the wings, rump and tail, where it is bright. Under parts paler than in the male. 766a. Azure Bluebird, (*S. s. azurea*) Southern Arizona and eastern Mexico. Very similar to the eastern Bluebird.

767. Western Bluebird, (*Sialia mexicana occidentalis*).

West of the Rockies from British Columbia south. Male: Length, 6.5 inches. Whole head and neck, rump, wings and tail, rich blue. Middle of back, breast and sides, bright chestnut. Belly and under tail coverts pale, bluish white. Female: Duller than the male; about the same as the eastern Bluebird. 767a. Chestnut-backed Bluebird, (*S. m. bairdi*) Rocky Mts. from northern U. S. to Mexico. Chestnut on the back, rather brighter than the Western. 767b. San Pedro Bluebird, (*S. m. anabetae*) Lower California. Like the Chestnut-backed.

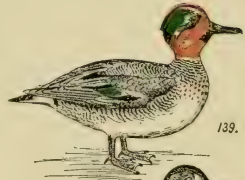
768. Mountain Bluebird, (*Sialia arctica*).

America west of the Plains and from Great Slave Lake to Mexico. Length, 6.5 in. Above, light azure blue. Below, pale and more greenish and shading gradually into white on the abdomen. Female: Nearly uniform gray, lighter on the belly and brightening into blue on the rump, wings and tail.



139. Green-winged Teal, (*Anas carolinensis*).

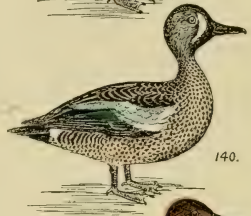
North America, breeding north of the U. S. and migrating south of U. S. Length 14 inches. Head, chestnut. Green patch back of the eye. Chin, black and rather lengthened crest of purplish black feathers on the back of the head. Upper parts and flanks barred with black. Wings gray with a green speculum. Female: Wings like the male; head, pale buff, streaked with dark brown. Upper parts brown with buffy edged feathers. Breast buffy and spotted; rest of under parts white.



139.

140. Blue-winged Teal, (*Anas discors*).

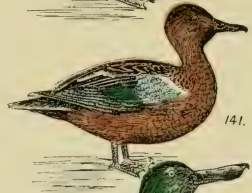
Whole of North America, but more common in the East. Breeds from middle U. S. northwards. Length, 15.5 inches. Top of head and chin, black; rest of head dark gray. A large white crescent on each side of the forepart of the head. Back dusky with U shaped bars of buff. Entire under parts reddish buff and spotted with dark brown. Lesser wing coverts, pale blue. A white patch formed by the tips of the greater coverts is in front of the green speculum. Under tail coverts, black. White patch on either side of the tail. Female: Top of head, black; chin and throat, white; rest of head brownish white streaked with dusky. Otherwise similar to the male except that the green speculum is wanting.



140.

141. Cinnamon Teal, (*Anas cyanoptera*).

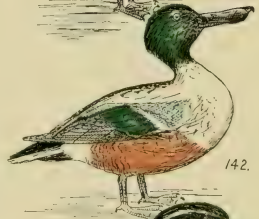
America west of the Rocky Mts. from British Columbia southwards. Length, 17 inches. Top of head, black. Rest of head, neck and entire under parts, dark chestnut. Back, wings and tail similar to No. 140. Female: Similar to the female of No. 140, but more reddish and the green speculum is slightly defined.



141.

142. Shoveller. (*Spatula clypeata*).

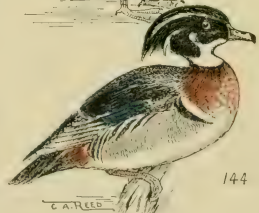
Found throughout North America, but not common on the North Atlantic coast. Length, 19 inches. Head and neck, dark green. Upper back, neck and breast, white. Wing coverts pale blue with white tips. Wings brownish with a green speculum. Under parts rich chestnut. Black under tail covers and white patch on each side of tail. Female: Head, brownish white streaked with dusky. Chin and throat buffy shading into reddish buff below and spotted with brown. Upper parts and wings similar to the male but paler.



142.

144. Wood Duck, (*Ae sponsa*).

Whole of temperate North America, breeding throughout its range. Length, 18 inches. Lengthened crest and sides of head, metallic purple and green. Breast purplish with white arrow shaped spots. Female: Head and short crest gray; throat, line around eye and space back of it white, as are the under parts. Breast reddish buff, spotted with dark brown. Back, brownish green. Wings like those of the male.



144

HOW A RUFFED GROUSE WAS PHOTOGRAPHED.

Ruffed Grouse are very wary birds, especially in localities where they are extensively hunted, and that includes nearly their whole range. They rely to a great extent upon their color protection, but nevertheless let them think that you see them, and they are very acute observers, and they will be off like a flash, followed by the rumbling whirr of their wings in their haste to get out of sight.

Very few even passably good photographs are seen of Ruffed Grouse outside of captivity, and I doubt if they can be secured without great difficulty, except perhaps in Maine, where the hunters in their eagerness to slay deer, rarely trouble the grouse. A few months ago one of the leading magazines of out door sports published two excellent pictures of a Ruffed Grouse on her nest. The maker of the photographs however did not effectively conceal his work and they plainly show that they are frauds. The photograph on the opposite page is the best bona-fide photograph of a live Ruffed Grouse that I have ever seen. The manner in which it was secured is described by Mr. Embury:

One afternoon, May 14, 1902, I was summoned by a friend to inspect a nest of a Ruffed Grouse on the top of a hill a little north of the beautiful village of Franklin, N. Y. At the base of a chestnut tree, only a few paces from a wood road along which I had often wandered, there greeted my eyes a bunch of leaves hollowed out slightly. A few leaves had been carelessly thrown over, but did not completely conceal the buff-tinted eggs. Later on several occasions when the female was flushed, the leaves were seen to fly back over the eggs as a result of the action, both of the feet and wings. By actual count after the removal of a few of the leaves, there were twenty eggs, a surprisingly large number.

The nest, eggs and surroundings were easily recorded, but to photograph the bird was quite a different matter. A semi-circular hide of bark was made and placed within five feet of the nest. Behind this the camera was so set that the lens projected slightly through a small opening towards the nest. Lack of light made it necessary to give an exposure of two seconds. Experience had taught that this could be done with a noiseless and well concealed shutter, only. A slight movement as well as the sharp click have spoiled results only too often previously. A paste board hood was drawn over the lens tube and the shutter was rendered noiseless by padding with rubber. Concealing myself forty or fifty feet away, I awaited the return of the parent bird.

Over my head, a Yellow-bellied Sapsucker sounded his roll on a hollow oak, louder than I had ever heard before, while a chipmunk

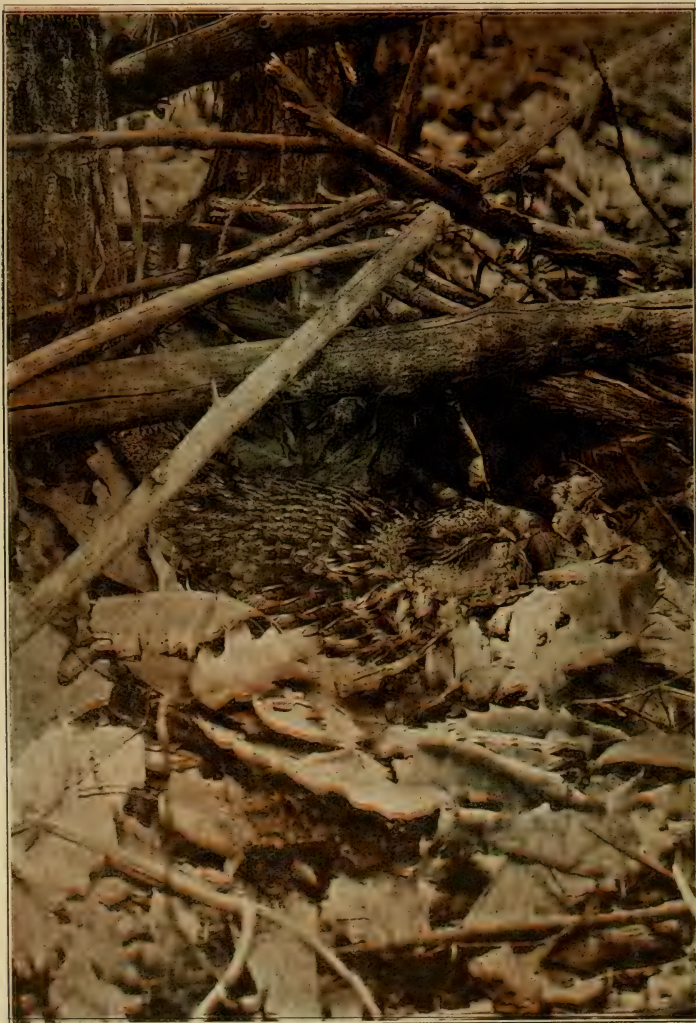


Photo from life by Geo. C. Embody.
RUFFED GROUSE ON NEST.

scampered over to my carrying case to have a taste of my focussing cloth. An hour had passed and no grouse had yet shown up, so I decided to try another day. At the suggestion of my friend the hide was removed to a distance and was to be placed a few feet nearer each day until a favorable position had been reached.

A week later, I had the opportunity to visit the nest again and found that so well had my friend aided me that the hide was within four feet of the nest and the old bird was still sitting. The bird left the nest while the camera was being adjusted and another hour of waiting did not see her return. The outfit was then left to the mercy of the



Photo by Geo. C. Embury

NEST OF RUFFED GROUSE (20 eggs)

squirrels and wandering cattle, while I took a stroll to watch a couple of Red-tailed Hawks feeding their young in the top of a giant Hemlock tree. This proved to be very interesting but the light began to fail after a half hour of watching, so I hastened back to note developments at the base of the chestnut tree. Dame Partridge was settled on her eggs and a few minutes later I was returning to my room with a satisfied yet somewhat doubtful feeling. No time was lost in developing the picture which is reproduced here. A week and a half later as the nest was visited, three addled eggs and seventeen empty shells testified to the success of the faithful Ruffed Grouse.

THE HERRING GULL.

Coursing swiftly o'er the waters,
Watching for his prey below him,
Flies great *Larus argentatus*,
Flies the Herring Gull so proudly.
Now he settles on the wave-tops,
Calling oft' to his companions,
Calling softly to himself now,
Calling loudly to the swift wind.
On the bay and rivers living,
Neither fears he man nor powder;
Soars he now, nor moves his great wings;
Stained their tips with dark cold water,
Where they touched it in their beating.
In the winter, still undaunted,
Gathers he with all his kinsman,
Into crowds on frozen river,
On the ponds and on the great lakes.
Braving gale and coldest blizzard,
Scorning cold and wind with brave heart,
True child he of storm and winter,
Going north when first the spring comes;
North among the cliffs and icebergs,
There to raise his young in safety.
All admiring do we see him,
Flying high above man's kingdom,
Free to roam among the great clouds;
The one sphere by man unconquered.
May he e'er fly, unmolested,
O'er our ice clad ponds and rivers,
O'er our lakes and frozen waters.

—GUY EMERSON.



GREEN-WINGED TEAL.

A. O. U. No. 139.

(Anas carolinensis.)

RANGE.

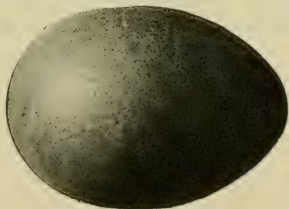
Found throughout North America, and breeds from the boundary of the United States northwards. In winter they migrate south of the borders of the United States.

DESCRIPTION.

Length, 14 in.; extent 23 in.; tail 3 in. Eye, brown; bill, black; feet grayish. Head and the upper part of the neck, a rich chestnut; a black patch on the chin; a broad metallic green band back of the eye, shading into black and surrounding the eye, and margined below with a narrow line of white. Upper parts waved with fine black and white bars. Under parts buffy white, changing to a deep buff on the breast which is plentifully spotted with black. A white crescent in front of the wing. Primaries and wing coverts gray; speculum green on the inner half and velvety black on the outer, bordered in front with the chestnut tips of the coverts and edged behind with the white tips of the secondaries. Rump and tail coverts blackish, mottled with gray; the black extends below forming a band in front of the lower tail coverts; which are white below and rich cream color on the sides. Female—Upper parts light brownish streaked on the head and neck with dark brown and the feathers on the back having dark centers. Under parts white tinged with buffy on the neck and breast, and spotted with dark brown. Wings about the same as on the male.

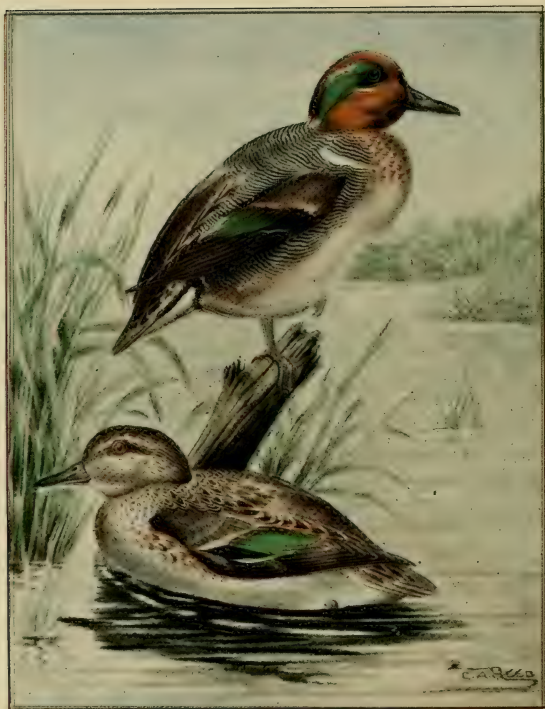
NEST AND EGGS.

Breeds from the northern border of the United States to Alaska and Greenland. The nest is placed on the ground in a clump of grass, in swampy places along the borders of streams or ponds. It is made of grass and weeds and lined with feathers from the breast of the bird. They lay from five to eight eggs of a plain buffy color.



HABITS.

Green-winged Teal are a close second to the Wood Duck in point of beauty. According to sportsmen they have other good points besides



GREEN-WINGED TEAL.

their beauty, for they are considered to be the best table bird among the entire duck family. Although every fall and spring they are hunted with great vigor in localities where they most frequent, they are still one of the most abundant ducks that we have. That so many of them are left is probably due to their activity and swiftness of flight, they being so speedy on the wing that it tests the skill of the best of marksmen to bring them down.

Besides being very swift and powerful fliers, they are extremely active and graceful when on land. They have none of the waddling manner common to most of the ducks, but run about with an ease and agility that is not surpassed by the Snipe family. They are essentially fresh water ducks and few of them are found along the sea coast. Watery meadows, lakes, ponds, and rivers are their favorite grounds, especially those where flags and rushes are abundant to serve both as a natural screen from the observation of enemies and as good feeding grounds. They live for the greater part upon various grains, duckweed and other water plants, grass, seeds and water insects. They obtain most of their food at night, especially when the weather is fair and the moon is present. In the day time large flocks of them assemble upon some quiet body of water and pass the time sleeping, where with heads laid on their backs, and the bill tucked beneath the feathers they float about like so many corks. In localities where they are much hunted they do not often take such quiet naps, but are upon the move nearly all day long, only stopping to rest when they find a natural hiding place where hunters rarely stray.

They commence to come from the North about the end of September, and some time during March pass through the United States again on the way to their breeding grounds. Their migrations for the most part are performed at night although flocks that have not succeeded in finding a favorable stopping place may be still seen upon the wing by day. When migrating either by day or night, they fly at a high elevation.

When startled while upon the water, they immediately spring upwards, using both their feet and wings and are in full and speedy flight at once. They never rise by running along the water a few paces as most ducks do, but clear it at the first jump. When moving from one locality to another they fly in a straight line, but at other times they are very erratic in their flight. A flock feeding peacefully, may suddenly start up, wheel about in zigzag flight, then as suddenly return to their starting point.

ONE OF MY FAVORITES.

Even when the woods have given place to cultivated fields, and its first nesting places have been destroyed by the progress of improvement, the House Wren does not, like some other species, forsake its haunts, but continues to dwell near the habitation of man, even though a town or city has sprung up where once the forest stood. In some cases men have been thoughtful enough to provide this untiring friend with a habitation by putting up boxes on posts; but where this has not been done, the Wren will soon find a satisfactory nesting place for himself, for no hole or corner is left unexplored, and if no other place can be found it will take possession in a crevice of a wall or even the pockets of an old coat if hung outside. On some occasions pumps have been so persistently filled up with grass and weeds that the owners were glad to provide their determined little tenants with suitable houses.

Few birds can drive away this Wren from a box or Woodpecker hole to which it has taken a fancy; even though it does not require it for immediate use. Though repeatedly expelled by superior force the cunning bird will bide his time, and in the absence of his opponent, fill up the entrance to the cavity so that the other party cannot enter, and will even destroy the eggs of the other bird if they have been laid. At times he will not hesitate to face in open combat birds many times his size, and such is the fierceness of his attack that he nearly always conquers.

On one occasion a pair of Wrens nested near a dwelling house, and soon after she began to set, was caught and killed by a cat. The male bird who had witnessed the affair and tried at the risk of his own life to prevent it, ceased his song and disappeared from the premises. The next day he returned with a companion and incubation proceeded as though nothing had happened.

Wrens feed almost wholly on insects and their eggs, and they destroy such immense quantities of these that they are one of the most useful birds that the farmer can encourage to settle on his premises. If the weather is favorable they come to us in the spring about the middle of May and remain until during October. House Wrens have always been favorites of mine and one of the clearest recollections of my childhood days, is that of a pair of Wrens who took up their abode in a hollow stump in the garden. What a pleasure it was when first I viewed the bramble built nest and the six reddish dotted eggs.

JOS. F. HONECKER.



Address communications for this department to

MEG MERRYTHOUGHT, Box 772, Waterbury, Ct.

MY DEAR YOUNG FOLKS:

With this number closes the first year of our bird chats. How do you like our corner, and what part do you like the best? Write and tell me, and also tell me what you would like added to the department.

We have enjoyed the letters from the young folks which Uncle Sam has brought from all over the country; from New York, Pennsylvania, Illinois, Ohio, Kansas, Missouri, Minnesota, Montana, Dakota, California, and even Texas, as well as from all the New England States. First comes one of our boys from Massachusetts, with his list of 93 birds seen this year; then a Missouri lad goes to the head with his list of 110; and now a New York reader exceeds even this, with a list of 114; we give you his letter on another page.

I wish you could have seen an Indigo bunting and his wife getting their daily rations in our garden last fall. They were very fond of some stray heads of Hungarian grass, but the slender stalks would not bear the weight of even this tiny bird. How do you think he managed to get his dinner? Standing on the wire fence he pulled the seed-spikes towards him with his bill, held it there with his foot, and cracked seed at his leisure. Do not forget as you gather around your Christmas trees at the happy holiday time, that you have some little feathered friends outside, who will appreciate decorated trees as well as you. not however with candles and bright tinsel (though I doubt not they would enjoy pop-corn festoons,) but with berries, bits of suet, and nuts.

We hope to meet every one of you in our corner of the magazine during the months of 1903, with many new friends.

May Christmas be a very merry one to you all is the wish of

MEG MERRYTHOUGHT.

ANSWERS TO PUZZLES IN THE NOVEMBER NUMBER.

Numerical. Enigma. Thanksgiving Turkey. What is its name.
American Goldfinch.

ROLL OF HONOR:—Julia H. Watts, Lexington, Texas; Dora Shirrefs Elizabeth, New Jersey; Chas. H. Rodgers, New York City; Marietta Washburn, Goodwin, S. D.; Ellora B. Mix, Stafford Springs, Conn.

FROM OUR MAIL BAG.

The principal places where I have studied birds this year are Central Park, New York City; Leonia, N. J.; Brandon, Vt.; and Harrisville, N. H. My list since January 1st, is 114 species, representing 29 families, as follows: Warblers, 26; Finches, 19; Blackbirds, Orioles. etc., 7; Flycatchers and Thrushes, 6 each; Hawks, Vireos and Swallows, 5 each; Woodpeckers and Wrens, 4 each; Herons, Titmice and Kinglets, 3 each; Goatsuckers, Crows and Jays, 2 each; and Gulls, Ducks, Vultures, Swifts, Hummingbirds, Kingfishers, Cuckoos, Rails, Sandpipers, Grouse, Starlings, Tanagers, Waxwings and Creepers, one each. I have seen a number of partial albino English Sparrows in New York. If only a few feathers are white they are generally in the wings or tail. I have also seen a robin with a white feather in its wing, and several times a male Black-throated Blue Warbler with a white edge to the shoulder. Among the many gray squirrels in Central Park is a pure black one.

CHAS H. RODGERS, Age 14.

A GRUMBLER'S FATE.

Ducky Sponsa lived with his mother and eleven little sisters and brothers near a beautiful clear lake. Their house was of oak and although there was but one room, there was ample space for Mrs. Wood Duck and her children. The Wood Duck preferred to spend all his time out of doors, seeking food, or standing guard on a limb not far away from the snug home.

The one room of the cottage was ceiled with oak, the carpet was of weeds and grass, and there was a feather bed for the babies, of the softest down, which the mother had taken from her own white vest.

From the round doorway could be seen the blue waters of the lake, and wooded slopes now charming in the tender greens of early Spring. In spite of the beautiful surroundings, Ducky Sponsa was not happy, for with birds, as well with boys and girls, it is not what we have that makes us happy, but what we are, and I am sorry to say that a very discontented little heart beat beneath the downy breast of this little bird.

Though he was not yet twenty-four hours old, he grumbled because

his brothers crowded him and stepped on his toes, he grumbled because he could not go out and sail upon the water, how should he ever reach it so far away. He cried because the doorway was so far from the ground. What if he should fall, he would surely break his neck. He cried for a gorgeous coat like the one his father wore; he cried because he was too warm; he cried because he was too cold; in short he cried for everything and he cried for nothing. As soon as the last fluffy duckling had left its shell, Mrs. Wood Duck decided that life in the open air was better for her children, and that once upon the waters of the lake, they could get plenty of food. But how do you suppose she was to get these twelve young ducklings from a hole in a tree, eight feet from the ground, to the waterside, twenty yards away. This is what she did.

First she lifted squalling Ducky Sponsa in her bill, by the nape of the neck, and landed him safely at the foot of the tree; then back she flew and took Daffy Duckling by the wing and bore her to the ground to her brother's side; back again she flew for another, then another and another until in less time than I can tell it, there were twelve fluffy balls on the grass ready to follow mother to the water's edge.

Here, all through the bright summer months, the little family sailed upon the placid bosom of the lake, or played among the grasses at its edge, making trips into the forest for insects and other dainties for frequent lunches. Thus summer passed. The children grew, as children have a way of doing, and the twelve little ducklings were now twelve handsome full grown ducks. It was a pretty sight to see Ducky and his brothers floating on the water, proudly raising their golden-green crests, with their spotted ruddy breasts, white vests and ties, and with their iridescent backs throwing bright sprays of color into the sunlight, while Daffy followed seemingly as happy as they, though her gown was of sooty brown with white feather trimmings.

But alas. Although Ducky Sponsa had donned the splendid plumage of the mature bird, he still kept his ill-temper, and was as cross and hard to suit as when he first saw the sunlight in the hollow oak. "Peet-peet, oe-eek, oe-eek," you might have heard him scold all day long and I am not sure but that he scolded in his dreams.

When October came with its cool days, Madam Wood Duck called her children to join their hands to take the trip to the warmer Southland. "Peet-peet" called Ducky Sponsa, "I shall not go. Who knows what dreadful things we might meet on that long journey?" So he slipped away and hid in a quiet inlet among the shadows of the forest, until his mates should be gone.

Here on the very day after his comrades had taken their flight, he

was seen and shot by a hunter, who stroked his feathers and admired the rich colors, and wished that his sister at home was not so particular about wearing birds on her hat.

ENIGMA.

You'll find my 1st in swear words,
My 2nd is in pray.
My 3rd's not found in milk curds
But always found in whey.
My fourth and final letter
Is in the word contend.
There's no bird you know better
Than this pugnacious friend.

QUERIES.

1. What bird sews leaves together to make a nest?
 2. What birds build and live in a tenement house of many apartments?
 3. What bird always uses snake skin to line her nest?
 4. What three birds cover the outside of their nests with lichens?
 5. What ones build a globe of coarse grasses with an entrance in the side?
 6. Which nest in burrows made by themselves?
 7. What two tunnel in banks?
 8. Which one lines her nest with down plucked from her own breast?
 9. Which one walls up his wife and feeds her through a small opening during incubation?
 10. Name three which build no nest at all?
-

GLEANINGS.

THE CHICKADEE.

"There is no sorrow in thy song,
No winter in thy year."

"As I stood looking, I heard a smart 'Tche-day-day-day' close to my ear, and looking up, saw four or five chickadees which had come to scrape acquaintance with me, hopping amid the alders within three or four feet of me. I had heard them farther off at first, and they had followed me along the hedge. They day-day'd and lisped their faint notes alternately, and then, as if to make me think they had some other errand than to peer at me, they pecked the dead twigs, the little, topheavy, black-crowned, volatile fellows.
(Thorea.)

INDEX.

Accidents.....	140
Acrobats, The Little.....	31
Alone With the Birds At Dawn.....	347
An Interesting Captive.....	81
An Unexpected Visitor.....	172
Asiatic Merle, The.....	26
Awakening, The.....	148
Babes in the Woods.....	252
Beans or Birds.....	145
Bird Chats With Our Young Friends	28
" " " " " "	59
" " " " " "	91
" " " " " "	123
" " " " " "	155
" " " " " "	187
" " " " " "	218
" " " " " "	250
" " " " " "	282
" " " " " "	312
" " " " " "	342
" " " " " "	377
Bird Enemies	248
Bird Land Tragedy, A.....	234
Bird Photography, Ins and Outs of.....	96
Bird's Picnic, The.....	159
Birdless Wood, The.....	158
Blackbird, Yellow-headed (color-chart).....	330
Blue Jay Then and Now, The.....	256
" " Surgeon, The.....	264
Bobolink.....	241
" (Poem).....	245
" " 	172
Broken Series, A.....	204
Brown Creeper, A, (Poem).....	94
Camera Against a Phoebe, The.....	339
Castle, The.....	165
Chat, Yellow-breasted (color chart).....	47
Chickadee, Domesticating the (Poem).....	30
Cottage by the Wood, The.....	235
Cowbird.....	199
" Dwarf.....	199
Cowbird's Nest, A.....	164
Crossbill, White-winged.....	37

Crow (History of Tim).....	283
“ (Jack My Tame Crow).....	189
“ The.....	116
Curlew, Long-billed.....	5
Daisy.....	251
Deserted Home, The.....	8
Domesticating the Chickadee.....	349
Duck, Am. Scaup (color chart).....	301
“ Blue-winged Teal (color chart).....	301
“ Canvas-back (color chart).....	301
“ Cinnamon Teal (color chart).....	301
“ Green-wing Teal (color chart).....	367
“ Lesser Scaup (color chart).....	301
“ Redhead (color chart).....	301
“ Shoveller (color chart).....	367
“ Wood (color chart).....	367
Eagle, Bald.....	2
English Sparrow, The.....	284
Fashion's Fancies.....	343
Favorite Birds, The.....	188
Feathered Acrobats.....	32
February Birds.....	135
Few of My Friends, A.....	297
Flycatcher, Least.....	75
Flycatcher, Scissor-tail, A Handsome.....	49
Flycatcher, Vermillion (color chart).....	78
Gnatcatcher, Blue-gray.....	278
Godwit, Hudsonian.....	210
Goose, Canada.....	137
Grackle, Purple.....	160
“ Bronze.....	161
“ Florida.....	161
Grebe, American-eared (color chart).....	238
“ Holboell's (color chart).....	238
“ Horned (color chart).....	238
“ Pied-billed (color chart).....	238
“ St. Domingo (color chart).....	238
Grosbeak, Cardinal (color chart).....	78
Grosbeak, Blue (color chart).....	366
“ Rose-breasted.....	293
“ Rose-breasted (color chart).....	78
Grouse, Ruffed (How a Ruffed Grouse was photographed).....	369
Gull Herring (poem).....	372
Handsome Scissor-tail, A.....	49
Hawk, American Rough-leg (color chart).....	270
“ Ferruginous Rough-leg (color chart).....	270
“ Harris' (color chart).....	270
“ Pigeon.....	87
“ “ (An Interesting Captive).....	81

Hawk, Red-tailed.....	265
" Swainson's (color chart).....	270
History of Tim.....	283
Honey Creeper, Bahama (color chart).....	331
House With Two Stories.....	167
How a Ruffed Grouse was Photographed.....	369
How Birds Bathe.....	216
Ins and Outs of Bird Photography.....	96
Jacana, Mexican (color chart).....	174
January Picnic, A.....	28
Jay, Blue, Then and Now.....	256
" " the Blue Jay Surgeon.....	264
Jenny Wren (Poem).....	251
Jimmie the Jay.....	125
Kingfisher, Belted.....	288
Lodging of the White-breasted Nuthatch.....	170
Magpie American (color chart).....	330
" Yellow-billed (color chart).....	330
" American.....	120
Martin, Purple, the Castle.....	165
Meadowlark, Western.....	273
" (color chart).....	330
" western (color chart).....	330
Mergansers, American.....	246
" Hooded.....	113
Merle, Asiatic.....	26
Message from Peggy.....	123
Nest-building Under Difficulties.....	68
Nighthawk.....	128
" A Note on the.....	217
Nuthatch, White-breasted, Lodging of.....	170
Odd Nests.....	108
One of My Favorites.....	376
Oology.....	179
Oriole's Nest, The.....	223
Oven Bird.....	23
" " A Pretty Pedestrian.....	197
Owl, American Hawk.....	90
" Long-eared (color chart).....	271
" Arctic Horned (color chart).....	271
" Dusky Horned (color chart).....	271
" Great Horned (color chart).....	271
" Short-eared (color chart).....	271
" Western Horned (color chart).....	271

Partridge, California (color chart)	111
" Gambel's (color chart)	111
" Massena (color chart)	111
" Mountain (color chart)	111
" Plumed (color chart)	111
Patch of Sunshine, A	111
Phalarope, Northern (color chart)	174
" Red (color chart)	174
" Wilson's (color chart)	174
Phoebe	181
" The Camera Against a	339
Photographing Game Birds	10
Picnic, A January	28
Plover, Black-bellied	56
Plover, Killdeer (color chart)	175
" Piping (color chart)	175
" Semi-palmated (color chart)	175
" Snowy (color chart)	175
" Wilson's (color chart)	175
POEMS.	
Acrobat, The Little	31
Alone with the Birds at Dawn	347
Birdless Wood, The	158
Birds' Picnic, The	159
Bobolink	245
Brown Creeper	94
Chickadee	30
Chickadee	348
Deserted Home, The	8
Fashion's Fancies	343
Herring Gull	368
Jenny Wren	251
Myth of the Song Sparrow	158
Oriole's Nest, The	223
Redbreast, The	222
True Incident, A	92
Veery, The	191
Vireo, the Warbling	325
Polly's Adventure	60
Prairie Hen	308
Preacher or Yellow Journalist, Which?	313
Pretty Pedestrian, A	197
Rail, Black (color chart)	300
" Farralone (color chart)	300
" King (color chart)	300
" Sora (color chart)	300
" Virginia (color chart)	300
" Yellow (color chart)	300

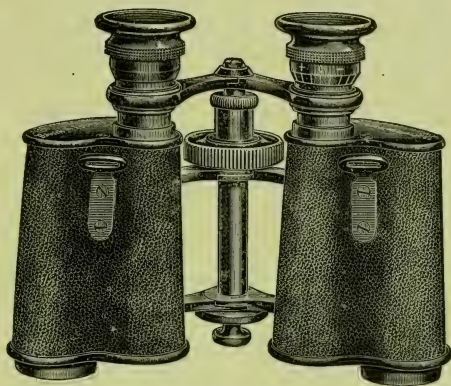
Ramble in the Marsh.....	69
Redstart, American.....	303
Roadrunner.....	73
Robin (A Broken Series).....	204
Sandpiper, Bartramian.....	177
School Outing, A.....	337
Shrike, Northern.....	40
Skimmer, Black (color chart).....	206
Some Winter Nests.....	59
Sparrow, Chipping (color chart).....	110
" Clay-colored (color chart).....	110
" English.....	284
" Field.....	229
" Field (color chart).....	110
" Fox.....	168
" Gambel's (color chart).....	239
" Golden-crowned (color chart).....	239
" Harris (color chart).....	239
" Intermediate (color chart).....	239
" Song.....	64
" Swamp.....	15
" Swamp (color chart).....	110
" Tree (color chart).....	110
" White-crowned (color chart).....	239
" White-throated (color chart).....	239
Summer Acquaintance, A.....	156
Swift, White-throated.....	357
Tanager, Scarlet (color chart).....	78
Tanager, Summer (color chart).....	78
Teal, Green-winged.....	373
Tern, Arctic.....	207
" Black (color chart).....	207
" Common (color chart).....	207
" Foster's (color chart).....	207
" Least.....	153
" Noddy (color chart).....	206
" Roseate (color chart).....	207
" Sooty (color chart).....	206
Thrush, Willow.....	193
" Wilsons.....	193
" Wilsons (A Woodland Songster).....	18
" Wood.....	333
Towhee.....	212
" White-eyed.....	214
Trials and Troubles of Birds.....	147
Turnstone (color chart).....	174
Veery.....	193
" (A Woodland Songster).....	18
Veeyr, The (Poem).....	191

Vireo, Red-eyed	316
" Warbling	325
Voice from China	106
Walk in July, A	285
Warbler, Audubon's (color chart)	142
" Black and white	103
" Black and white (color chart)	331
" Black-poll (color chart)	331
Warbler, Black-throated Blue (color chart)	331
" Black-throated Gray (color chart)	331
" Black-throated Green (color chart)	46
" Blue-winged	52
" Canadian (color chart)	142
" Cape May (color chart)	143
" Chestnut-sided (color chart)	143
" Golden-cheeked (color chart)	46
" Grace's (color chart)	47
" Hermit (color chart)	46
" Hooded (color chart)	46
" Kentucky (color chart)	47
" Magnolia (color chart)	142
" Maryland Yellow-throat (color chart)	47
" Myrtle (color chart)	142
" Palm (color chart)	143
" Pileolated (color chart)	142
" Prairie (color chart)	143
" Sonora (color chart)	143
" Townsend's (color chart)	46
" Wilson's (color chart)	142
" Yellow	133
" Yellow (color chart)	143
" Yellow Palm (color chart)	143
" Yellow-throated (color chart)	47
Water Thrush, Louisiana	225
Waxwing, Bohemian	119
With the Birds at Dawn	185
Woodland Songster, A	18
Woodpecker, Calif. (color chart)	79
" Lewis (color chart)	79
" Red-bellied (color chart)	79
" Red-breasted Sapsucker (color chart)	79
" Red-headed (color chart)	79
Wren, House (The Little Acrobat)	31
" House (Feathered Acrobats)	32

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